

MARINE CORPS COOPERATIVE DEGREE PROGRAM

A thesis presented to the Faculty of the U.S. Army  
Command and General Staff College in partial  
fulfillment of the requirements for the  
degree

MASTER OF MILITARY ART AND SCIENCE

by

BRIAN J. HEARNSBERGER, MAJOR, USMC  
B.S., TEXAS A&M UNIVERSITY, 1981

Fort Leavenworth, Kansas  
1995

Approved for public release; distribution is unlimited.

19951011 051

REPORT DOCUMENTATION PAGE			Form Approved OMB No. 0704-0188	
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.				
1. AGENCY USE ONLY (Leave blank)	2. REPORT DATE 2 June 1995	3. REPORT TYPE AND DATES COVERED Master's Thesis, 2 Aug 94 - 2 Jun 95		
4. TITLE AND SUBTITLE  Marine Corps Cooperative Degree Program		5. FUNDING NUMBERS		
6. AUTHOR(S)  Major Brian J. Hearnberger, USMC		6. PERFORMING ORGANIZATION REPORT NUMBER		
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)  U.S. Army Command and General Staff College ATTN: ATZL-SWD-GD Fort Leavenworth, Kansas 66027-6900		10. SPONSORING / MONITORING AGENCY REPORT NUMBER		
9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES)		11. SUPPLEMENTARY NOTES		
12a. DISTRIBUTION / AVAILABILITY STATEMENT  Approved for public release, distribution is unlimited.		12b. DISTRIBUTION CODE  A		
13. ABSTRACT (Maximum 200 words)  The Marine Corps relies on the fully-funded Special Education and Advanced Degree Programs to fill positions that require a masters degree. The purpose of this study was to determine if the Marine Corps should offer a Cooperative Degree Program to officers enrolled in intermediate level school to fill additional masters degree positions. Methodology. Procedures included: (a) reviewing relevant literature, (b) determining if the fully-funded programs fulfill the masters degree requirements, (c) examining the effect of an increase in the number of intermediate level school officers, and (d) determining the feasibility of starting a Cooperative Degree Program with civilian colleges. Selected Findings. The fully-funded programs do not fill all of the masters degree positions. Many billets are filled by officers with a baccalaureate degree or a masters degree unrelated to the prerequisite curriculum. Capitol College and the Florida Institute of Technology agreed to accept six hours of graduate transfer credit toward a systems management degree for completion of the resident Command and General Staff course. Conclusions. A Cooperative Degree Program to augment nontechnical, systems management positions is feasible. The Marine Corps may need to seriously consider beginning a Cooperative Degree Program. The 406 Marine Corps masters degree positions should be reduced, filled, and/or prioritized.				
14. SUBJECT TERMS  Marine Corps, Postgraduate Masters Degree, Officer Intermediate Level School Education		15. NUMBER OF PAGES 117		
17. SECURITY CLASSIFICATION OF REPORT Unclassified		18. SECURITY CLASSIFICATION OF THIS PAGE Unclassified		16. PRICE CODE
19. SECURITY CLASSIFICATION OF ABSTRACT Unclassified		20. LIMITATION OF ABSTRACT Unlimited		

## GENERAL INSTRUCTIONS FOR COMPLETING SF 298

The Report Documentation Page (RDP) is used in announcing and cataloging reports. It is important that this information be consistent with the rest of the report, particularly the cover and title page. Instructions for filling in each block of the form follow. It is important to *stay within the lines* to meet optical scanning requirements.

### Block 1. Agency Use Only (Leave blank).

**Block 2. Report Date.** Full publication date including day, month, and year, if available (e.g. 1 Jan 88). Must cite at least the year.

**Block 3. Type of Report and Dates Covered.** State whether report is interim, final, etc. If applicable, enter inclusive report dates (e.g. 10 Jun 87 - 30 Jun 88).

**Block 4. Title and Subtitle.** A title is taken from the part of the report that provides the most meaningful and complete information. When a report is prepared in more than one volume, repeat the primary title, add volume number, and include subtitle for the specific volume. On classified documents enter the title classification in parentheses.

**Block 5. Funding Numbers.** To include contract and grant numbers; may include program element number(s), project number(s), task number(s), and work unit number(s). Use the following labels:

C - Contract	PR - Project
G - Grant	TA - Task
PE - Program Element	WU - Work Unit Accession No.

**Block 6. Author(s).** Name(s) of person(s) responsible for writing the report, performing the research, or credited with the content of the report. If editor or compiler, this should follow the name(s).

**Block 7. Performing Organization Name(s) and Address(es).** Self-explanatory.

**Block 8. Performing Organization Report Number.** Enter the unique alphanumeric report number(s) assigned by the organization performing the report.

**Block 9. Sponsoring/Monitoring Agency Name(s) and Address(es).** Self-explanatory.

**Block 10. Sponsoring/Monitoring Agency Report Number.** (If known)

**Block 11. Supplementary Notes.** Enter information not included elsewhere such as: Prepared in cooperation with...; Trans. of...; To be published in... When a report is revised, include a statement whether the new report supersedes or supplements the older report.

**Block 12a. Distribution/Availability Statement.** Denotes public availability or limitations. Cite any availability to the public. Enter additional limitations or special markings in all capitals (e.g. NOFORN, REL, ITAR).

DOD - See DoDD 5230.24, "Distribution Statements on Technical Documents."

DOE - See authorities.

NASA - See Handbook NHB 2200.2.

NTIS - Leave blank.

### Block 12b. Distribution Code.

DOD - Leave blank.

DOE - Enter DOE distribution categories from the Standard Distribution for Unclassified Scientific and Technical Reports.

NASA - Leave blank.

NTIS - Leave blank.

**Block 13. Abstract.** Include a brief (*Maximum 200 words*) factual summary of the most significant information contained in the report.

**Block 14. Subject Terms.** Keywords or phrases identifying major subjects in the report.

**Block 15. Number of Pages.** Enter the total number of pages.

**Block 16. Price Code.** Enter appropriate price code (*NTIS only*).

**Blocks 17. - 19. Security Classifications.** Self-explanatory. Enter U.S. Security Classification in accordance with U.S. Security Regulations (i.e., UNCLASSIFIED). If form contains classified information, stamp classification on the top and bottom of the page.

**Block 20. Limitation of Abstract.** This block must be completed to assign a limitation to the abstract. Enter either UL (unlimited) or SAR (same as report). An entry in this block is necessary if the abstract is to be limited. If blank, the abstract is assumed to be unlimited.

MARINE CORPS COOPERATIVE DEGREE PROGRAM

A thesis presented to the Faculty of the U.S. Army  
Command and General Staff College in partial  
fulfillment of the requirements for the  
degree

MASTER OF MILITARY ART AND SCIENCE

by

BRIAN J. HEARNSBERGER, MAJOR, USMC  
B.S., TEXAS A&M UNIVERSITY, 1981

Accession For	
NTIS CRA&I	<input checked="checked" type="checkbox"/>
DTIC TAB	<input type="checkbox"/>
Unannounced	<input type="checkbox"/>
Justification	
By	
Distribution /	
Availability Codes	
Dist	Avail and/or Special
A-1	

Fort Leavenworth, Kansas  
1995

Approved for public release; distribution is unlimited.



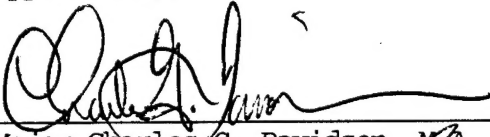
MASTER OF MILITARY ART AND SCIENCE

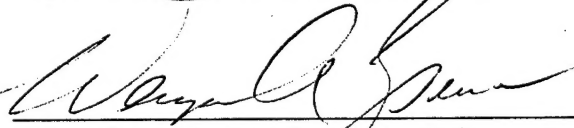
THESIS APPROVAL PAGE

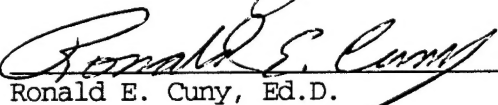
Name of Candidate: Major Brian J. Hearnberger

Thesis Title: Marine Corps Cooperative Degree Program

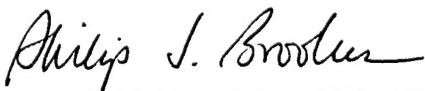
Approved by:

  
Major Charles G. Davidson, M.A., Thesis Committee Chairman

  
Colonel Wayne A. Spencer, M.S., Member

  
Ronald E. Cuny, Ed.D., Member

Accepted this 2d day of June 1995 by:

  
Philip J. Brookes, Ph.D., Director, Graduate Degree Programs

The opinions and conclusions expressed herein are those of the student author and do not necessarily represent the views of the U.S. Army Command and General Staff College or any other governmental agency. (References to this study should include the foregoing statement.)

## ABSTRACT

MARINE CORPS COOPERATIVE DEGREE PROGRAM by Major Brian J, Hearnberger,  
USMC, 111 pages.

The Marine Corps relies on the fully funded Special Education and Advanced Degree Programs to fill positions that require a master's degree. The purpose of this study was to determine if the Marine Corps should offer a Cooperative Degree Program to officers enrolled in intermediate-level school to fill additional master's degree positions.

Methodology. Procedures included: (a) reviewing relevant literature, (b) determining if the fully funded programs fulfill the master's degree requirements, (c) examining the effect of an increase in the number of intermediate-level school officers, and (d) determining the feasibility of starting a Cooperative Degree Program with civilian colleges.

Selected Findings. The fully funded programs do not fill all of the master's degree positions. Many billets are filled by officers with a baccalaureate degree or a master's degree unrelated to the prerequisite curriculum. Capitol College and the Florida Institute of Technology agreed to accept six hours of transfer credit toward a systems management degree for completion of the resident Command and Staff College course.

Conclusions. A Cooperative Degree Program to augment nontechnical, systems management positions is feasible. The Marine Corps may need to seriously consider beginning a Cooperative Degree Program. The 406 Marine Corps master's degree positions should be reduced, filled, and/or prioritized.

#### ACKNOWLEDGEMENTS

I am deeply indebted to my fellow Marines at Headquarters U.S. Marine Corps and Mrs. Linda Rohler, Command and Staff College Registrar, for their valuable time and support in the organization and completion of this thesis. Thanks to all of the marines, soldiers, and civilians at various Department of Defense agencies who provided guidance and constructive criticism.

I would like to express my sincere appreciation to the staff of the Combined Arms Research Library. This paper could not have been completed in association with the Army Command and General Staff Officer Course without the help of the research staff to obtain reference material through inter-library loans. The library is a model of efficiency.

I was also fortunate to have supportive committee members. Gordie Davidson, committee chairman, gave me the unlimited freedom to refine the subproblems. Colonel Spencer kept me in touch with the "Marine perspective," and Dr. Ron Cuny's advice gave me the insight to clarify my research methodology and help other officers struggling through Chapter 3.

Finally, my wife Marilyn deserves most of the credit for my ability to complete this study. Her personal support and commitment to "our profession" made completion of my master's degree seem effortless.

## TABLE OF CONTENTS

	<u>Page</u>
APPROVAL PAGE . . . . .	ii
ABSTRACT . . . . .	iii
ACKNOWLEDGEMENTS . . . . .	iv
LIST OF TABLES . . . . .	vii
 CHAPTER	
1. INTRODUCTION . . . . .	1
<div style="padding-left: 40px;"> The Statement of the Problem  The Subproblems  Background  Hypotheses  Significance of the Study  Assumptions  Definition of Terms  Limitations  Delimitations  Endnotes </div>	
2. LITERATURE REVIEW . . . . .	18
<div style="padding-left: 40px;"> Introduction  Historical Overview  Previous Research  Military Documents and Publications  Books  Periodicals  Reports  Trends  Summary  Endnotes </div>	
3. RESEARCH METHODOLOGY . . . . .	32
<div style="padding-left: 40px;"> Introduction  The Data  Research Methodology  Specific Projected Treatment of Each Subproblem  Literature  How the Problem Statement Was Answered  Endnotes </div>	

4. ANALYSIS . . . . .	51
Introduction	
The First Hypothesis	
The Second Hypothesis	
The Third Hypothesis	
Endnotes	
5. CONCLUSION . . . . .	73
Introduction	
Conclusions	
Discussion	
Recommendations	
Suggestions for Future Research	
APPENDICES	
A. LIST OF MARINE CORPS OFFICERS WITH A MASTER'S DEGREE . . . .	80
B. DATA FOR ARMY AND MARINE CORPS OFFICERS ATTENDING INTERMEDIATE-LEVEL SCHOOL . . . . .	84
C. SYSTEMS MANAGEMENT BILLET CURRICULA OBJECTIVES AND DESCRIPTIONS . . . . .	87
D. GENERIC SYSTEMS MANAGEMENT CURRICULUM . . . . .	89
E. LETTER TO CAPITOL COLLEGE REQUESTING TRANSFER CREDIT FOR COURSES TAKEN AT THE MARINE CORPS COMMAND AND STAFF COLLEGE . . . . .	90
F. LETTER TO THE FLORIDA INSTITUTE OF TECHNOLOGY REQUESTING TRANSFER CREDIT FOR COURSES TAKEN AT THE MARINE CORPS COMMAND AND STAFF COLLEGE . . . . .	94
G. AMERICAN COUNCIL ON EDUCATION DESCRIPTION AND CREDIT RECOMMENDATIONS FOR MARINE CORPS COMMAND AND STAFF COLLEGE . . . . .	96
H. LETTER FROM CAPITOL COLLEGE CONCERNING A POTENTIAL COOPERATIVE DEGREE PROGRAM . . . . .	98
I. LETTER FROM FLORIDA INSTITUTE OF TECHNOLOGY CONCERNING A POTENTIAL COOPERATIVE DEGREE PROGRAM . . . .	100
BIBLIOGRAPHY . . . . .	102
INITIAL DISTRIBUTION LIST . . . . .	110

## LIST OF TABLES

<u>Table</u>	<u>Page</u>
1. Marine Corps Master's Degree Positions . . . . .	52
2. Funded School Assignments For Master's Degrees . . . . .	53
3. Positions Not Filled by Funded School Assignments . . . . .	53
4. Marine Corps Master's Degree Positions . . . . .	55
5. Current Degree Descriptions Grouped By Naval Postgraduate School Department Titles . . . . .	57
6. Average Number of Army Officers Assigned to the Command and General Staff Officer Course That Did Not Have a Master's Degree . . . . .	61
7. Percentage of Eligible Army Officers Completing A Cooperative Degree Program . . . . .	62
8. Estimated Number of Marine Officers That Might Have Been Enrolled In A Cooperative Degree Program . . . . .	62
9. Potential Yearly Increase In The Number Of Marine Corps Officers Assigned To Intermediate-Level School Due To A Cooperative Degree Program . . . . .	63
10. Marine Corps Systems Management Positions . . . . .	65
11. Systems Management Degrees in the Quantico, VA Area . . . . .	68
12. Army Officers Assigned to the Command and General Staff Officer Course From 1994 Through 1995 . . . . .	84
13. Army Officers Assigned to the Command and General Staff Officer Course From 1989 Through 1993 . . . . .	85
14. Marine Corps Officers Assigned to the Command and Staff College From 1989 Through 1993 . . . . .	85
15. Marine Corps Officers Assigned to Intermediate-Level School From 1989 Through 1993 . . . . .	86

## CHAPTER 1

### INTRODUCTION

Certain positions in the Marine Corps are required to be filled by officers who have obtained a master's degree from an accredited civilian institution. These positions are filled by regular officers who have completed a master's degree prior to entering the service, through a Marine Corps funded program, or through a partially funded off-duty program. This paper examined the existing Marine Corps master's degree programs to determine if these programs satisfy the needs of the service. This thesis considered a Cooperative Degree Program, similar to the current Army Cooperative Degree Program, as an additional means for Marine Corps officers to obtain a master's degree in order to qualify for positions that require a graduate-level education.

#### The Statement of the Problem

Should the Marine Corps offer a Cooperative Degree Program to its officers? Officers enter the U.S. Marine Corps with a baccalaureate degree. There are limited opportunities for an officer to complete a master's degree during his military career. A Cooperative Degree Program for Marine Corps officers was evaluated as a possible means for officers to complete the requirements for a civilian master's degree in association with an intermediate-level military school to fill billets requiring a postgraduate education. This paper

may assist the Marine Corps to determine if a Master's Cooperative Degree Program should be pursued.

### The Subproblems

The First Subproblem. Do the Special Education and Advanced Degree Programs fulfill the master's degree requirements of the Marine Corps? These programs provide officers for positions requiring a postgraduate education.<sup>1</sup> The positions that require an officer with a master's degree were analyzed to determine if these programs meet the graduate education needs of the Marine Corps.

The Second Subproblem. How would a Cooperative Degree Program affect the Marine Corps? Actual statistics for Army officers enrolled in the Command and General Staff Officer Course, Army Cooperative Degree Program, and Marine Corps officers enrolled in the Command and Staff College were compared to obtain a probable number of Marine Corps officers who might enroll in a Cooperative Degree Program.

The Third Subproblem. Is a Cooperative Degree Program in association with Marine Corps Command and Staff College feasible? The ability to begin a Cooperative Degree Program with one or more colleges near the Marine Corps Command and Staff College, Quantico, Virginia, was considered. The curriculum necessary to fill a nontechnical Marine Corps master's degree position was compared to civilian degree descriptions at two colleges.



### Background

Education is the foundation of success for any professional. In most cases, the U.S. Marine Corps officer begins his education in the profession of arms during college at precommissioning training. Training is conducted by way of Reserve Officer Training Corps classes, summer training, and military service academies. Upon completion of a baccalaureate degree, newly commissioned officers attend basic and military occupational or specialty training. The officer is then assigned to a military unit.

Throughout his career, the Marine Corps officer is exposed to formal education through service and/or nonresident professional military education.<sup>2</sup> Selection boards for service schools, degree completion programs, and advanced civilian education are convened annually to review the official records of officers eligible for additional education. The boards then recommend officers to attend service schooling. The Commandant of the Marine Corps is the approval authority for the selection of Marine Corps officers to attend service schools.

Amphibious Warfare School, Command and Staff College, and the Marine Corps War College are the principle service schools that Marine Corps officers are selected to attend as they advance to positions of increased rank. Additional Marine Corps officers are selected to attend other similar-level service schools and civilian institutions.

Marine Corps captains selected for advanced training attend the Amphibious Warfare School or a military occupational specific school, such as the Army Infantry Officer Advance Course. The instruction at

these schools focuses on the tactical employment of military units, the backbone of career-level service education.

Intermediate-level schooling for selected Marine Corps majors and lieutenant colonels is primarily completed at the Marine Corps Command and Staff College. A small number of Marine Corps officers attend the command and staff colleges of the Air Force, Army, or Navy.<sup>3</sup> Majors and lieutenant colonels attend command and staff college between their thirteenth and seventeenth year of service. The education at these colleges focuses on the operational use of military units. Students are introduced to theater operations, national security strategy, and national military strategy.<sup>4</sup>

Senior-level schooling for selected colonels and senior lieutenant colonels is completed at a service war college. Instruction is centered on the use of military forces to achieve national objectives. Political, economic and social issues, and national security strategy are the major emphasis.<sup>5</sup> Selected colonels and senior lieutenant colonels attend a war college between their 19th and 25th year of service.

Much of the instruction at the Marine Corps Command and Staff College and the other intermediate-level military schools is recognized by the American Council on Education as graduate-level curriculum. A master's degree is awarded to a portion of the students for completion of a military studies paper and additional academic requirements in conjunction with the core curriculum. The Marine Corps Command and Staff College has Federal degree-granting authority and is seeking accreditation from the Southern Association of Colleges and Schools.

The Army Command and General Staff Officer Course has two means for officers to complete a master's degree in association with intermediate-level school.

Army Master of Military Art and Science Degree Program. An officer can apply for and complete a master's degree in conjunction with the Army Command and General Staff Officer Course. The Master of Military Art and Science program requires the officer student to submit and orally defend a thesis, complete a comprehensive oral exam concerning the Army Command and General Staff Officer Course curriculum, and maintain at least a "B" average in all courses.<sup>6</sup> This program is available to students from all services assigned to the Army Command and General Staff Officer Course. The Master of Military Art and Science Degree does not require any specific course of study and does not qualify officers for technical positions. This degree does qualify officers for faculty positions at civilian colleges that have a reserve officer training program requiring a master's degree.

Army Cooperative Degree Program. Army officers can apply to the Army Personnel Command Assignment Branch for a Cooperative Degree Program at a civilian institution in association with intermediate-level schooling. If the Marine Corps adopted a Cooperative Degree Program, officers would follow a similar application process through Headquarters Marine Corps. Officers who complete the Cooperative Degree Program receive a master's degree from a civilian college.<sup>7</sup>

Students are awarded six hours of credit from a civilian college for completion of the Army Command and General Staff Officer Course curriculum. They attend two civilian university courses (six hours of credit) taught on the Command and General Staff College campus during Terms II and III of the Command and General Staff Officer Course. Cooperative Degree Programs are offered by the University of Missouri-Kansas City, Florida Institute of Technology, University of South Carolina, or Kansas State University.<sup>8</sup> Upon completion of the Command and General Staff Officer Course, Army officers enrolled in the Cooperative Degree Program have twelve hours of credit toward their master's degree.

Following graduation from the Army Command and General Staff Officer Course, Army officers enrolled in the Cooperative Degree Program must attend the associated civilian college as a full-time resident student and complete a master's degree within eleven months.<sup>9</sup>

Upon completion of either the Master of Military Art and Science or the Army Cooperative Degree Program, the officer is awarded an accredited master's degree recognized by colleges and accredited academic associations throughout the nation.

The Air Force Air Command and Staff College does not offer a Cooperative Degree Program. The college does provide its graduates with a letter of recommendation that can be submitted to civilian colleges that describes twenty-seven hours that the American Council on Education recognizes as graduate-level instruction. Should a graduate of the Air Command and Staff College apply and be accepted for a civilian graduate program, transfer credit of all or part of the

twenty-seven hours is dependent upon institutional and program of study requirements. The letter of recommendation is used by graduates of the Air Command and Staff College for off-duty education credits.<sup>10</sup>

The Navy College of Naval Command and Staff does not offer a Cooperative Degree Program, but graduates receive a Master of Arts Degree in National Security and Strategic Studies. The College of Naval Command and Staff was accredited by the New England Association of Colleges and Schools in 1991.<sup>11</sup>

It is my assumption that since the College of Naval Command and Staff has been accredited to grant a master's degree to its graduates, the remaining intermediate service schools will probably pursue regional and national accreditation at some point in the future. This would have a negligible impact on a Cooperative Degree Program because master's degrees from military schools do not qualify officers for degree-specific positions. Ninety-seven percent of the master's degree positions in the Marine Corps require a specific course of study, such as education, management, industrial engineering, data and computer systems, operations analysis, or international relations.

Many Marine Corps officers complete the requirements for a master's degree through off-duty education; attending graduate school after routine working hours and on weekends, and through correspondence courses.<sup>12</sup>

"The Marine Corps has identified and validated several hundred positions which are required to be staffed by officers who possess postgraduate-level education."<sup>13</sup> Most of these billets are filled by officers who have completed the Special Education Program or Advanced

Degree Program. These programs are fully funded. Selected officers attend the Naval Postgraduate School, Air Force Institute of Technology, or a civilian graduate school. In 1994, approximately twenty percent of these billets were filled by officers without the appropriate degree. Some of the positions were filled with an officer who had a similar degree.<sup>14</sup> Due to the lack of officers with a postgraduate education, some of these billets were assigned to officers that only had a baccalaureate degree.

A Marine Corps bulletin is published each year to solicit applications for fully funded master's degree programs. Officers interested in the programs submit applications to the Commandant of the Marine Corps, who convenes a selection board. "Selection is based on an officer's career potential, past performance of duty, previous academic record, and availability for assignment."<sup>15</sup>

The fully funded master's degree programs develop officers for technical and nontechnical positions that require a master's degree. There are ninety-two school assignments funded by these programs each year. Seventy-seven Special Education Program and fifteen Advanced Degree Program positions are budgeted for each year for 1995 through 2000.<sup>16</sup> Augmented by additional officers who complete their postgraduate education through off-duty instruction and apply for a military occupational specialty to fill a master's degree position, these programs are designed to fulfill a Marine Corps requirement.

Currently, 406 Marine Corps officer billets require a master's degree. Of these, 393 are Special Education and Advanced Degree Program positions,<sup>17</sup> and 13 are Marine Officer Instructors in Naval

Reserve Officer Training Corps positions at civilian universities that require officers with a master's degree.<sup>18</sup>

### Hypotheses

The first hypothesis was that the Marine Corps Special Education and Advanced Degree Programs fail to fill the officer positions requiring a master's degree.

The second hypothesis was that a Cooperative Degree Program will have an acceptable effect on officer manning levels, allowing the Marine Corps to benefit from such a program.

The third hypothesis was that a theoretical Cooperative Degree Program in association with Marine Corps Command and Staff College, Quantico, Virginia, would be agreed to by at least one college or university in the northern Virginia area.

### Significance of the Study

The U.S. Marine Corps does not have a Cooperative Degree Program. The Marine Corps Command and Staff College, Marine Corps University has obtained degree-granting authority from Congress and is currently pursuing civilian accreditation for their Master of Military Studies Program from the Southern Association of Colleges.<sup>19</sup> Doug McKenna, Associate Dean, Education Policy, Marine Corps Command And Staff College, estimates that the earliest that accreditation from the Southern Association of Colleges will be obtained for the Marine Corps Master of Military Studies Program is 1997.<sup>20</sup>

The Cooperative Degree Program does not require military schools to obtain degree accreditation because the participating civilian

schools are already accredited by their regional association of colleges. However, it does require that colleges recognize and accept transfer credit for completion of a resident intermediate-level school.<sup>21</sup>

This thesis examined whether the Marine Corps should pursue the establishment of a Cooperative Degree Program. The significance of the study was to provide data for the Marine Corps to consider in order to fill the existing master's degree billets with additional qualified officers. Perceived reasons for a Marine Corps Cooperative Degree Program are listed below:

(1) A Cooperative Degree Program could provide additional officers for billets requiring a master's degree that have not been filled by qualified officers due to the limitation on the number of funded master's degree programs.<sup>22</sup>

(2) If the Marine Corps Command and Staff College could establish a Cooperative Degree Program, the program may help the college gain regional accreditation for its Master of Military Studies Program.

(3) A Cooperative Degree Program would provide another opportunity for selected Marine Corps officers to earn a master's degree. However, the professional development objectives of the Marine Corps must be weighed against the cost of having a limited number of field-grade officers remain in school for an additional year.

(4) A civilian postgraduate education for selected field-grade officers may help the Marine Corps understand and serve the ever-changing needs of government officials and the American people.



We must not ignore civilian education. It provides a broadening experience and a cross-fertilization that is essential to keeping the military open to new ideas. This is also in line with the old American ideal that the military is of the people.<sup>23</sup>

(5) More than one-half of the articles concerning senior military education discussed the need for officers who understand political, economic, and social problems.

#### Assumptions

The first assumption is that Marine Corps officers should make a personal commitment to continuing their education throughout their military career.

Second, additional professional education will benefit Marine Corps officers because graduate school can prepare officers for future assignments and careers, teach them how to critically analyze problems, etc.

Third, officers who complete additional advanced professional education programs would be required to complete a utilization tour. They would remain on active duty for a period of up to three years beyond the requirements for intermediate-level school, for a Cooperative Degree Program completed within one year.<sup>24</sup>

Fourth, a Marine Corps Cooperative Degree Program would complement, but not replace, the Special Education and Advanced Degree Programs.

Fifth, the Commandant of the Marine Corps, with assistance from the President, Marine Corps University, would be the approval authority for officers to complete a Cooperative Degree Program based on the

needs of the Marine Corps and the officer's military occupational specialty.

Sixth, officers approved for a Marine Corps Cooperative Degree Program would receive their normal pay and allowances, but would be responsible for the funding of tuition plus books and other incidental support similar to the Army program.

Seventh, the Department of Defense tuition assistance funds would not be authorized for a Marine Corps Cooperative Degree Program because it is a full-time educational program.<sup>25</sup>

Eighth, the current Marine Corps master's degree positions are relevant.

Ninth, a Marine Corps Cooperative Degree Program could be expanded beyond the Marine Corps Command and Staff College and include officers enrolled in other military schools. All requirements for a Cooperative Degree Program would have to be met to expand the program to additional military schools.

And finally, for the Marine Corps to agree upon a Cooperative Degree Program, there are two prerequisites. First, the supporting colleges and universities must allow at least six hours of transfer credit for Command and Staff College resident courses. Second, the supporting school(s) must offer at least six hours of civilian university courses that can be used for completion of both the Marine Corps Command and Staff College resident course and the supporting school's master's degree program in order for officers to complete a Cooperative Degree within two years after reporting to the Command and Staff College.

### Definition of Terms

Advanced Degree Program. A fully funded Marine Corps officer postgraduate-level education completed at a civilian university that supplements the Special Education Program.

Command and General Staff Officer Course. The Army intermediate-level school for field-grade officers, Fort Leavenworth, Kansas.

Command and Staff College. The Marine Corps intermediate-level school for field-grade officers, Marine Corps Base, Quantico, Virginia.

Cooperative Degree Program. A program established to allow selected commissioned officers to complete the requirements for a master's degree at a civilian school, usually in association with attendance at an intermediate-level military school.

Intermediate-Level School. A military institution of higher learning where field-grade officers receive additional education at the graduate-level of instruction. These schools prepare officers for command and staff assignments. Examples include the Air Force Air Command and Staff College, Army Command and General Officer Course, Navy College of Naval Command and Staff, Marine Corps Command and Staff College, and the command and staff colleges located in the countries of our allies.

Special Education Program. A primary fully funded Marine Corps officer postgraduate-level education offered at the Naval Postgraduate School, the Air Force Institute of Technology, and at limited civilian universities supplemented by the Advanced Degree Program.

Student. An officer approved to complete professional military training or postgraduate studies at a civilian university.

#### Limitations

Time to research and analyze the problem statement was constrained by the requirements of the Army Command and General Staff Officer Course curriculum being completed in association with this thesis.

There is limited information on this subject in books and technical papers. Most data and opinions will be derived from government documents and statistics, catalogs, periodicals, and personnel directly related to the research.

This thesis did not consider master's degree courses related to the study of foreign languages as part of a potential Cooperative Degree Program. Because language training is conducted separately by the Defense Language Institute, it is not considered to be postgraduate study in the Marine Corps.

Articles located during the literature review were initially limited to the periodicals published during the last five years. Relevant articles published prior to 1989, which are footnoted in the periodicals, were reviewed and screened for value to the research.

This paper did not consider limited-duty officers because positions that these officers fill do not require a master's degree.

#### Delimitations

This paper limited the analysis of intermediate-level school officers to Marine Corps officers who graduated from the Marine Corps

Command and Staff College and Army officers who graduated from the Army Command and General Staff Officer Course from 1989 through 1993. Air Force and Navy graduates of their respective intermediate-level schools were not covered because their schools do not have Cooperative Degree Programs. Because the Army is the only service with a Cooperative Degree Program, statistics for Army officers were related to Marine Corps officers in order to estimate the impact of a potential Marine Corps program.

A potential Marine Corps Cooperative Degree Program completed in association with Command and Staff College was the only master's degree evaluated in this paper. Statistics from other graduate-degree programs were used to determine the potential need for a Marine Corps Cooperative Degree Program.

A potential Cooperative Degree Program for officers enrolled in other military schools besides Marine Corps Command and Staff College was not considered. The majority of Marine Corps officers selected to attend graduate-level professional military education attend the Command and Staff College.

### Endnotes

<sup>1</sup>Department of the Navy, Headquarters United States Marine Corps, Marine Corps Order 1520.9F, Special Education Program (SEP) (Washington, D.C.: Department of the Navy, 4 May 1993), 1.

<sup>2</sup>Chairman, Joint Chiefs of Staff, CM-1618-93, Military Education Policy Statement (Washington, D.C.: Department of Defense, 23 March 1993), II-1.

<sup>3</sup>Department of the Navy, Headquarters United States Marine Corps, Marine Corps Bulletin 1560, Academic Year 1994-95 (AY94-95) Intermediate-Level Schools (ILS) Selections (Washington, D.C.: Department of the Navy, 3 June 1993), 1-3.

<sup>4</sup>Chairman, Joint Chiefs of Staff, CM-1618-93, Military Education Policy Statement, II-7.

<sup>5</sup>Ibid., II-9.

<sup>6</sup>Department of the Army, U.S. Army Command and General Staff College, CGSC Circular No. 351-1, United States Army Command and General Staff College Catalog (Fort Leavenworth, KS: Department of the Army, July 1994), 69.

<sup>7</sup>Ibid., 76.

<sup>8</sup>Ibid., 78-85.

<sup>9</sup>Ibid., 75.

<sup>10</sup>Telephone interview with Glenn L. Spivey, Education Advisor, Air Force Air Command and Staff College, Maxwell Air Force Base, AL, 13 October 1994.

<sup>11</sup>Department of the Navy, College of Naval Command and Staff and Continuing Education, Naval War College Report of Self Study (Newport, RI: 1993), I-8.

<sup>12</sup>Facsimile letter to Brian Hearnberger, from Greg Shields, Headquarters United States Marine Corps Voluntary Education Programs, Washington, D.C., 13 October 1994.

<sup>13</sup>Department of the Navy, Headquarters United States Marine Corps, Marine Corps Order 1520.9F, Special Education Program (SEP), 1.

<sup>14</sup>Facsimile letter to Brian Hearnberger, from Chad Lienau, Headquarters United States Marine Corps Special Education Program Coordinator, Washington, D.C., 1 October 1994.

<sup>15</sup>Department of the Navy, Headquarters United States Marine Corps, Marine Corps Order 1520.9F, Special Education Program (SEP), 9.

<sup>16</sup>Department of the Navy, Headquarters United States Marine Corps, Letter 1520/MMOA-3, OP-14 Data Update for the FY96/97 Naval Comptroller Budget (Washington, D.C.: Department of the Navy, 1 June 1994), 1.

<sup>17</sup>Facsimile letter to Brian Hearnberger, from Chad Lienau, Headquarters United States Marine Corps Special Education Program Coordinator, Washington, D.C., 30 September 1994.

<sup>18</sup>Facsimile letter to Brian Hearnberger, from William Franchi, Headquarters United States Marine Corps Regular Officer Procurement Director, Washington, D.C., 2 November 1994.

<sup>19</sup>Telephone interview with Doug McKenna, Associate Dean, Education Policy, Marine Corps Command and Staff College, Quantico, VA, 23 August 1994.

<sup>20</sup>Ibid.

<sup>21</sup>Department of the Army, Army Regulation 621-1, Training of Military Personnel at Civilian Institutions (Washington, D.C.: Department of the Army, 15 October 1985), 12.

<sup>22</sup>Facsimile letter, Chad Leinau, 30 September 1994.

<sup>23</sup>John R. Galvin, General, "How We Can Nurture Military Strategists," Defense (January-February 1989): 29.

<sup>24</sup>Department of the Navy, Headquarters United States Marine Corps, Marine Corps Order 1520.9F, Special Education Program (SEP), 4.

<sup>25</sup>Department of the Navy, Headquarters United States Marine Corps, Marine Corps Order 1560.26 w/ch1, Marine Corps Tuition Assistance Program (Washington, D.C.: Department of the Navy, 20 May 1977), 5.

## CHAPTER 2

### LITERATURE REVIEW

#### Introduction

Education is a continuous topic of discussion within the Marine Corps, particularly in the leadership articles published in the Marine Corps Gazette, the professional journal of Marine Corps officers. It was readily apparent that the Marine Corps values professional education. Further, the professional reading program, endorsed by senior Marine Corps leaders, reinforces the value of further education to the growth and prosperity of the individual.

Recently, there has been a surge of interest in the professional education of officers. "With the establishment of the Marine Corps University in 1989, the Corps put a formal mantle over what had been essentially an informal process."<sup>1</sup> The Marine Corps Command and Staff College, under the direction of Marine Corps University, opened the School of Advanced Warfighting, a focused second-year program, in August 1990 to "amplify and complement" the academic training received at Command and Staff College.<sup>2</sup> Marine Corps University obtained Federal degree-granting authority from Congress on 22 March 1995. For academic years 1994 and beyond, the Command and Staff College will grant master's degrees in military studies to those officers completing their master's program. In addition, Marine Corps University is pursuing



civilian accreditation for their master's program through the Southern Association of Colleges and Schools.<sup>3</sup>

With the current focus on education, the Marine Corps should determine if the postgraduate educational programs offered by the other branches of the military could benefit the Corps. A critical analysis of each service's educational program should be conducted to determine benefits.

Literature concerning adult education is plentiful. There are endless "how to" books, articles, and studies that address the value that postgraduate education provides to students. Most of the literature relevant to this research discusses the benefit of education to an individual. The research for this paper was primarily concerned with the needs of the Marine Corps; benefits to individual officers are ancillary.

Approximately forty percent of the articles located through periodical indexes were written by or about Marine Corps officer professional education. This was a surprising discovery since the Marine Corps is the smallest of the services. It was readily apparent that the Marine Corps values professional education and that many officers have an opinion on the subject.

#### Historical Overview

The Marine Corps began to emphasize education in the latter part of the nineteenth century. The School of "Application" was opened in 1891 to educate new officers.<sup>4</sup> Soon after, the Marine Corps began sending field-grade officers to the other services' schools. Field-grade officer education within the Marine Corps began in 1920

with the opening of the Command and Staff College. Additionally, from 1925 to 1941 the Marine Corps sent fourteen officers to Ecol Superieure de Guerre, the intermediate-level school for French officers.<sup>5</sup> The Marine Corps has continued to expand educational opportunities for its field-grade officers throughout the twentieth century. Approximately 173 officers attended the Command and Staff College, sister service, foreign schools, and civilian colleges in 1994.<sup>6</sup>

#### Previous Research

A survey was conducted by Major Les Stein, U.S. Marine Corps, in 1986 to determine "Marine Corps officers' attitudes toward the career-enhancing value of graduate degrees."<sup>7</sup> By a margin of more than three to one, the respondents felt that an officer's career does not suffer if he or she does not have a graduate degree.<sup>8</sup> This survey was part of the requirement for his doctorate degree completed at the U.S. International University in San Diego, California.<sup>9</sup> The findings of his survey concluded that:

Marine Corps officers of all ranks do not consider graduate degrees as a factor in career enhancement. They also believed that the Marine Corps' ranking officers did not discourage them to seek such degrees. Finally, . . . officers of all ranks felt that officers with graduate degrees were not necessarily better leaders than those who did not have such degrees.<sup>10</sup>

His research refuted the majority of the literature reviewed concerning the attitude of Marine Corps officers concerning promotion. The needs of the service were the subject of this thesis. Therefore, a new survey of Marine Corps officers attitudes concerning the value of a master's degree for promotion was not required to answer the thesis question.

After examining the results of promotion boards, Stein found that a master's degree did not enhance a Marine Corps officer's chance of being selected for the next rank. Most analysts stated that "an officer's attainment of a degree improved his chances" of promotion.<sup>11</sup> The majority of the officers surveyed for Stein's study were correct in their assumption that a graduate degree does not help you get promoted.<sup>12</sup>

The research for Stein's dissertation confirmed that analysts and surveyed officers agreed that a graduate degree would make you more successful and be beneficial for a military career.<sup>13</sup> This finding appears to contradict his finding concerning the value of a graduate degree for promotion. Stein concluded that the officers surveyed defined success in relation to specific assignments a graduate degree would prepare them for vis-a-vis the value of such a degree for promotion. The researcher concluded from Stein's survey that Marine Corps officers would support a Cooperative Degree Program, whether or not the program enhanced their chances for promotion.

Major Stein was unable to determine why there is not a conclusive Marine Corps policy concerning the pursuit of postgraduate education.<sup>14</sup> The literature reviewed for this thesis, including Stein's survey led the researcher to the conclusion that there "is no formal Marine Corps policy or definitive guidance concerning graduate-level education."<sup>15</sup> Without a formal policy, officers must continue to speculate the value of a master's degree to the Marine Corps. After reading his work, it is the researcher's opinion that Marine Corps

officers would support a Cooperative Degree Program despite the lack of a formal education policy.

Andrus C. Burton, Jr., an Air Force officer assigned to the Air Force Academy, completed a dissertation during 1985 in partial requirement for a Doctor of Philosophy Degree to determine the impact that a master's degree has on the promotion velocity of Air Force Academy graduates. He concluded that a master's degree was beneficial for promotion.<sup>16</sup> But of greater importance to this paper was his determination from a survey of Air Force Academy graduates that "degrees in social science disciplines and those in management arenas are receiving more attention"<sup>17</sup> than during the 1960's and 1970's. The most accessible master's degree programs for potential Marine Corps Command and Staff College Cooperative Degree Program students are Business Administration and Systems Management. These courses of study are available in Quantico, Virginia, through Averitt and Capitol Colleges respectively. Burton's research also concluded that there was a need for a comprehensive policy concerning the value of a master's degree to the Air Force.<sup>18</sup> His work confirmed the researcher's belief that the Marine Corps is not the only service that needs a policy concerning postgraduate-level education.

#### Military Documents and Publications

Orders, directives, and regulations provided a current view of existing military education policies. Regulations and directives concerning the Army's Cooperative Degree Program are the basis for a possible Marine Corps Cooperative Degree Program. Army Regulation 621-1, Training of Personnel at Civilian Institutions, Section II,

Chapter 5, describes the Cooperative Degree Program.<sup>19</sup> The same program was considered during the research of this thesis.

Marine Corps orders describing the fully funded Special Education<sup>20</sup> and Advanced Degree<sup>21</sup> Programs were considered to determine the curricula available through the fully funded programs. These orders describe the policies and procedures of the fully funded programs. If the Marine Corps implemented a Cooperative Degree Program, the master's degree position descriptions should be standardized to correspond with appropriate civilian degree. An example is: Marine Corps master's degree positions for computer engineering, defense systems analysis, data systems, and system acquisition management could be renamed to correspond with the term "Systems Management."

Orders describing voluntary education<sup>22</sup> and tuition assistance<sup>23</sup> programs were screened and do not conflict with the current Army Cooperative Degree Program.<sup>24</sup> It can be concluded that if the Marine Corps offered a Cooperative Degree Program, the current voluntary education and tuition assistance orders would not require modifications.

#### Books

Jerry Miller, while the Director of the American Council on Education Office of Educational Credit, stated that "educational credentials will continue to be important . . . as a talent filter as well as a talent developer" for society."<sup>25</sup> Educational credentials are a means to satisfy positions of responsibility in the military. The Marine Corps relies on fully funded education programs as the talent

developers for master's degree positions. A Cooperative Degree Program is another way for civilian colleges to award credit for "extrainstitutional"<sup>26</sup> learning. Although Command and Staff College is military specific, the American Council on Education has established graduate-degree equivalencies for:

3 semester hours in US national security or 3 in US foreign policy, 3 in evolution of strategic thought, and 1-3 in directed research according to the receiving institution's review of the students thesis paper.<sup>27</sup>

Civilian college faculty members are the final authority for credit equivalencies. They "determine policy" for accepting the recommendations of the American Council on Education and "applying them toward the student's educational objective."<sup>28</sup>

Stephen Bailey stated that "off-duty education on military bases has poor quality."<sup>29</sup> He believes that regular contact should occur between the main campus faculty and off-campus students. Off-duty education at Quantico, Virginia, is usually conducted after duty hours at the Base Education Center or a similar classroom facility. A facility that offers civilian education on a military base is usually referred to as a satellite campus.<sup>30</sup> While a Cooperative Degree Program would begin in conjunction with Command and Staff College on a military base, the preponderance of the master's degree instruction would be completed on the main campus during the 11 months following graduation from the Command and Staff College. Standards of instruction are more comprehensive for on-campus instruction.<sup>31</sup> Attending graduate school at the main campus is comparable to attending a resident military school.

Most books concerning adult learning focus on the value of graduate study to the individual. They are philosophical in nature and describe the advantages that continued education offers to the individual. Research for this thesis was designed to determine if the Marine Corps could benefit from a Cooperative Degree Program. The value of a master's degree to individuals enrolled in a potential Cooperative Degree Program is purely incidental.

### Periodicals

Military and educational journals provided a perspective of the constant attempt to improve professional education. Most articles focus on the individual benefits and needs relative to officers that complete additional formal education. The focus of this paper is the needs of the Marine Corps, vice the needs of individual officers. There are few articles that discuss the needs of the institution.

Periodicals concerning military education published during the last five years were reviewed. Material published prior to 1989 was footnoted in several articles and reports. Relevant articles prior to 1989 were screened for value to the research.

An article entitled, "NOFAD Program: Allowing for Advanced Education," by Captain Carlton W. Meyer, describes research relative to the thesis question.<sup>32</sup> The article discusses a proposed Non-funded Advanced Degree Program (NOFAD) for active duty officers. The NOFAD program would allow regular Marine Corps officers to temporarily transfer to the reserves to complete a postgraduate degree at a civilian institution.<sup>33</sup>

The program discussed some of the reasons why few Marine Corps officers have completed a postgraduate degree. Some of these reasons are: (1) Marines are limited to local colleges and the degrees they offer; (2) Marines must have a stable work schedule to attend; (3) Marines may be reassigned to a more demanding position or transferred before they can complete the degree program; and, (4) Night school infringes on free time otherwise spent on family and recreation.<sup>34</sup>

The proposed program has similarities to a Cooperative Degree Program. The Commandant of the Marine Corps would be the approval authority. Officers applying for the NOFAD program would have to be accepted by an accredited university. The program of study must "compliment"<sup>35</sup> the officer's career, adding value to the Marine Corps.

The Non-funded Advanced Degree Program is worthy of further research. This program would be open to all officers, whereas the Cooperative Degree Program would be limited to officers enrolled in an intermediate-level school.

General John Galvin, while assigned as the U.S. European Command Commander in Chief, testified to Congress that "an officer must be a broad and balanced thinker, a conceptualizer."<sup>36</sup> His article in Military Strategists discusses the importance of civilian schooling as a means to cross-fertilize officers to keep the military open to new ideas. "This is in line with the old American ideal that the military is of the people."<sup>37</sup>

Colonel Allan R. Millett, while a member of the Naval War College Board of Advisors stated that "generals and admirals face



problems that are essentially problems defined by American political and social values . . . not those of the Armed Forces."<sup>38</sup> Senior military officers often point to the value of understanding American government, knowing what influences our economy, and understanding the moral issues that mold public opinion. Millet's statement captures the attitude of many articles in the Marine Corps Gazette that stress education. "Mind over matter" is a familiar phrase that epitomizes the value that Marine Corps officers place on continued education to enhance success in battle or during peacetime. The Armed Forces constantly work to improve professional military education.

#### Reports

Headquarters Marine Corps provided two reports that had direct impact on this thesis. These reports were used to answer the first subproblem. A list of Special Education and Advanced Degree Program positions delineated the master's degree billets by rank and unit that the Marine Corps fills with officers possessing postgraduate education credentials. Currently, there are 406 master's degree positions in the Marine Corps.<sup>39</sup> This figure includes thirteen Naval Reserve Officer Training Corps Marine Officer Instructor positions at civilian colleges.

A list of officers with masters' degrees provided current information about the qualifications of officers for master's degree positions requiring a specific course of study. This list was analyzed in Chapter 4 to determine what master's degrees share a common curriculum and compared to the current master's degree billet descriptions. There were 2,496 Marine Corps officers with a master's

degree on 1 September 1994.<sup>40</sup> The list included 113 degree descriptions.

#### Trends

The trend in the literature reviewed was that authors emphasize additional formal education to enhance the performance of professionals. There was no literature to provide conclusive evidence of just how much formal education is sufficient. Most of the literature reviewed assumed that more formal education is better.

#### Summary

There was no literature on the subject of a Marine Corps Cooperative Degree Program. Most of the periodicals and documents related to professional education were found in military libraries. The Air Force, Army, and Marine Corps are attempting to gain master's degree-granting authority for their respective intermediate-level schools, similar to the Navy's College of Naval Command and Staff. The potential Marine Corps Cooperative Degree Program would complement the current master's degree programs.

### Endnotes

<sup>1</sup>Ord J. Fink, Jr., Colonel, "Education: Ammunition for the Field-grade Officers T/O Weapon - his mind," Marine Corps Gazette 77, 6 (June 1993): 53.

<sup>2</sup>James M. Eicher, Lieutenant Colonel, "The School of Advanced Warfighting," Marine Corps Gazette 75, 1 (January 1991): 46.

<sup>3</sup>Facsimile letter to Brian Hearnberger, from Linda Rohler, Registrar, Marine Corps Command and Staff College, Quantico, VA, 3 April 1995.

<sup>4</sup>Jack Shulimson, "Daniel Pratt Mannix and the Establishment of the Marine Corps School of Application, 1889-1894," The Journal of Military History 55, 4 (October 1991): 469.

<sup>5</sup>Donald F. Bittner, "Foreign Military Officer Training in Reverse: U.S. Marine Corps Officers in the French Professional Military Education System in the Interwar Years," The Journal of Military History 57, 3 (July 1993): 488.

<sup>6</sup>Department of the Navy, Headquarters United States Marine Corps, Marine Corps Bulletin 1560, Academic Year 1994-1995 (AY94-95) Intermediate-Level School (ILS) Selections (Washington, D.C.: Department of the Navy, 3 June 1993), 1.

<sup>7</sup>Leslie Stein, Major, "Getting the Second Degree," Proceedings 115, 6 (June 1989): 70.

<sup>8</sup>Ibid.

<sup>9</sup>Leslie Stein, "The United States Marine Corps Officers' Attitude Toward Graduate Degrees" (Doctorate Dissertation, United States International University, November 1987), 1.

<sup>10</sup>Ibid., 77-78.

<sup>11</sup>Ibid., 78.

<sup>12</sup>Ibid.

<sup>13</sup>Ibid., 52.

<sup>14</sup>Ibid.

<sup>15</sup>Ibid., 85.

<sup>16</sup>Burton C. Andrus, Jr., "The Impact of Various Master's Degrees on the Careers of the United States Air Force Officers Who Are Academy Graduates" (Doctoral Dissertation, University of Denver, 1985), 98.

<sup>17</sup>Ibid., 100.

<sup>18</sup>Ibid., 93.

<sup>19</sup>Department of the Army, Army Regulation 621-1, Training of Military Personnel at Civilian Institutions (Washington, D.C.: Department of the Army, 15 October 1985), 12.

<sup>20</sup>Department of the Navy, Headquarters United States Marine Corps, Marine Corps Order 1520.9F, Special Education Program (SEP) (Washington, D.C.: Department of the Navy, 4 May 1993), 1.

<sup>21</sup>Department of the Navy, Headquarters United States Marine Corps, Marine Corps Order 1560.19C, Advanced Degree Program (ADP) (Washington, D.C.: Department of the Navy, 8 September 1981), 1.

<sup>22</sup>Department of the Navy, Headquarters United States Marine Corps, Marine Corps Order 1560.25A w/ch 1, Marine Corps Voluntary Education Program (Washington, D.C.: Department of the Navy, 29 July 1981), 1.

<sup>23</sup>Department of the Navy, Headquarters United States Marine Corps, Marine Corps Order 1560.26 w/ch 1, Marine Corps Tuition Assistance Program (Washington, D.C.: Department of the Navy, 20 May 1977), 1.

<sup>24</sup>Department of the Army, Army Regulation 621-1, Training Military Personnel at Civilian Institutions, 12.

<sup>25</sup>Jerry W. Miller and Olive Mills, Credentialing Educational Accomplishment (Washington, D.C.: American Council on Education, 1978), 48.

<sup>26</sup>Ibid., 19.

<sup>27</sup>American Council on Education, The 1994 Guide to the Evaluation of Educational Experiences in the Armed Services: Air Force, Coast Guard, Department of Defense, and Marine Corps (Washington, D.C.: American Council on Education, 1994), 1-137.

<sup>28</sup>Miller and Mills, Credentialing Educational Accomplishment, 19.

<sup>29</sup>Stephen K. Bailey, Academic Quality Control: The Case of College Programs on Military Bases (Washington, D.C.: American Association for Higher Education, 1979), 12.

<sup>30</sup>Facsimile letter to Brian Hearnberger, from Greg Shields, Headquarters United States Marine Corps Voluntary Education Program Coordinator, Washington, D.C., 13 October 1994.

<sup>31</sup>Bailey, Academic Quality Control, 46.

<sup>32</sup>Captain Carlton W. Meyer, USMC, "NOFAD Program: Allowing for Advanced Education," Marine Corps Gazette 76, 3 (March 1992): 45.

<sup>33</sup>Ibid.

<sup>34</sup>Ibid.

<sup>35</sup>Ibid.

<sup>36</sup>General John R. Galvin, USA, "How We Can Nurture Military Strategists," Defense (January-February 1989): 29.

<sup>37</sup>Ibid.

<sup>38</sup>Colonel Allen R. Millett, USMCR, "Professional Military Education and Marine Officers," Marine Corps Gazette, 73, 11 (November 1989): 55.

<sup>39</sup>Department of the Navy, Headquarters United States Marine Corps, List of Marine Officers With Master's Degrees, By Major Subject Code (Washington, D.C.: Department of the Navy, 1 September 1994), 36.

<sup>40</sup>Department of the Navy, Headquarters United States Marine Corps, Roster of Special Education and Advanced Degree Program Billets (Washington, D.C.: Department of the Navy, 4 August 1994), 11.

CHAPTER 3  
RESEARCH DESIGN

Introduction

To answer the thesis question: "Should the Marine Corps offer a Cooperative Degree Program to its officers?," the researcher examined each of the following subproblems independently.

- (1) Do the Special Education and Advance Degree Programs fulfill the master's degree requirements of the Marine Corps?
- (2) How would a Cooperative Degree Program affect the Marine Corps?
- (3) Is a Cooperative Degree Program in association with Marine Corps Command and Staff College feasible?

Chapter 4 shows the analysis of each subproblem. Results of the research were compiled in Chapter 5 to answer the thesis question and to recommend whether or not the Marine Corps should offer a Cooperative Degree Program to officers enrolled in intermediate-level school.

The hypotheses were: (1) that the Marine Corps Special Education and Advance Degree Programs fail to fill the positions requiring a master's degree; (2) that a Cooperative Degree Program will have an acceptable effect on officer manning levels thus allowing the Marine Corps to benefit from such a program; and, (3) that a theoretical Cooperative Degree Program in association with Marine Corps

Command and Staff College would be agreed to by at least one college or university near Quantico, Virginia.

### The Data

The Primary Data. Quantitative data derived from current Marine Corps records was used to answer the first subproblem. Quantitative data from Marine Corps and Army records from 1989 through 1993 was used to answer the second subproblem.

The Secondary Data. Information derived from written materials concerning postgraduate education was used to answer the third subproblem. Secondary data included the subjective opinions of individual authors and college officials.

### Research Methodology

Subproblem One. A comparative analysis of quantitative data was used to determine if the fully funded Special Education and Advanced Degree Programs satisfy the positions requiring a master's degree in the Marine Corps.<sup>1</sup> Headquarters U.S. Marine Corps provided statistical information.<sup>2</sup> Master's degrees currently held by Marine Corps officers were compared to Naval Postgraduate School Systems Management degree titles<sup>4</sup> to determine if any of these officers have the prerequisites for Systems Management billets.

Subproblem Two. Analytical comparison methods described in Chapter 9 of Practical Research were used to complete the analysis and determine the impact of a Cooperative Degree Program on field-grade

officer manning levels.<sup>5</sup> The number of Army officers who completed a Cooperative Degree Program in conjunction with the Army Command and General Staff Officer Course<sup>6</sup> was related to the Marine Corps officers assigned to Command and Staff College.<sup>7</sup> From this data, a theoretical number of Marine Corps officers who might be enrolled in a Cooperative Degree Program was determined. The effect of a Cooperative Degree Program on Marine Corps officer manning levels was derived from an experimental Marine Corps Cooperative Degree Program population.

Subproblem Three. The feasibility of one or more colleges near Quantico, Virginia participating in a Cooperative Degree Program with the Marine Corps Command and Staff College to fill systems management billets was determined. The curriculum necessary to fill a nontechnical Marine Corps master's degree management position was compared to civilian degree descriptions from colleges near Quantico, Virginia.<sup>8</sup> Two colleges were requested to approve a theoretical Cooperative Degree Program.

#### Specific Projected Treatment of Each Subproblem

Restatement of Subproblem One. Do the Special Education and Advanced Degree Programs fulfill the master's degree requirements of the Marine Corps?

Data Needed. The data for the solving of subproblem one were: (a) the number of positions in the Marine Corps that require a master's degree;<sup>9</sup> (b) the number of Special Education and Advanced Degree school assignments funded each year;<sup>10</sup> (c) the number of majors and lieutenant



colonels that currently have the credentials to fill positions within the Marine Corps requiring a master's degree;<sup>11</sup> and, (d) the number of each specific degree needed to fulfill the master's degree requirements of the Marine Corps.<sup>12</sup>

Location of the Data. The data were located at Headquarters U.S. Marine Corps, Washington, D.C.

Means of Obtaining the Data. The numerical data were requested from the Special Education and Advanced Degree Programs Coordinator and the Regular Officer Procurement Director, Manpower Management Officer Assignments Branch, Headquarters U.S. Marine Corps. Prior verbal permission for release of the data was obtained. Facsimile letters were sent to each coordinator requesting the information.

How the Data Was Screened. The total number of Marine Corps officers possessing a master's degree<sup>13</sup> was screened for the number of majors and lieutenant colonels with degrees that qualified them for assignment to positions requiring a master's degree. Screening was essential because all Corps master's degree positions that could be filled by officers completing a Cooperative Degree Program in association with Command and Staff College are limited to these ranks.

How the Data Was Interpreted. The total number of positions that require a master's degree was determined by adding the Special Education and Advanced Degree positions<sup>14</sup> to the number of Marine Officer Instructor, Naval Reserve Officer Training Corps master's degree positions.<sup>15</sup>

The annual number of Special Education and Advanced Degree Programs school assignments (ninety-two) was multiplied times three to determine the school assignments that are projected to fill positions requiring a master's degree. The normal tour length for assignment to positions requiring a master's degree is three years.

The school assignments that are projected to fill positions requiring a master's degree every three years was subtracted from the total number of positions requiring a master's degree to determine the number of positions that were not expected to be filled from the Special Education and Advanced Degree Programs.

The number of officers required for each rank and specific type of master's degree was determined from a list of Special Education and Advanced Degree positions<sup>16</sup> and the Marine Officer Instructor, Naval Reserve Officer Training Corps master's degree positions.<sup>17</sup>

The number of majors and lieutenant colonels that might already have the credentials to fill systems management master's degree positions<sup>18</sup> was determined by comparing the types of degrees possessed by these officers to the Naval Postgraduate School master's degree descriptions. A Naval Postgraduate School catalog<sup>19</sup> was used to compare the systems management master's degree curriculum descriptions (types of master's degrees needed) to the 115 graduate degree subject titles (types of degrees possessed).<sup>20</sup>

How the Results of Analysis Were Shown. Tables were used to show calculations that determined if the Special Education and Advanced Degree Programs fulfill all of the master's degree positions. Spreadsheets display the number of master's degree positions for each

rank and specific billet description, and the number of majors and lieutenant colonels who have degrees similar to those granted by the Naval Postgraduate School.

Restatement of Subproblem Two. How would a Cooperative Degree Program affect the Marine Corps?

Data Needed. The data for solving subproblem two were: (a) the number of Army officers that attended the Army Command and General Staff Officer Course from 1989 through 1993 who did not possess a master's degree prior to intermediate-level school;<sup>21</sup> (b) the number of Army officers that completed a Cooperative Degree Program from 1989 through 1993 in conjunction with the Army Command and General Staff Officer Course;<sup>22</sup> (c) the number of Marine Corps officers that attended the Marine Corps Command and Staff College from 1989 through 1993 that did not possess a master's degree prior to intermediate-level school;<sup>23</sup> and, (d) the number of Marine Corps officers that attended intermediate-level school from 1989 through 1993.<sup>24</sup>

Location of the Data. The data were located at Army Command and General Staff College, Fort Leavenworth, Kansas; U.S. Total Army Personnel Command, Alexandria, Virginia; Marine Corps Command and Staff College, Quantico, Virginia; and Headquarters U.S. Marine Corps, Washington, D.C.

Means of Obtaining the Data. The numerical data were requested of the Registrar, Army Command and General Staff College; Cooperative Degree Program Manager, Total U.S. Army Personnel Command; Registrar,

Marine Corps Command and Staff College; and Director, Manpower Management Officer Assignments Branch, Headquarters U.S. Marine Corps. Prior verbal permission for release of the data was obtained. Facsimile letters were sent to the respective officials requesting the information.

How the Data Was Screened. The total number of Marine Corps officers assigned to Marine Corps Command and Staff College<sup>25</sup> was screened for the number of officers who did not possess a master's degree prior to intermediate-level school. Screening determined how many officers would have been eligible to apply for a potential Marine Corps Cooperative Degree Program from 1989 through 1993.

The total number of Army officers assigned to Army Command and General Staff Officer Course<sup>26</sup> was screened for the number of officers who did not possess a master's degree prior to intermediate-level school. Data from 1989 through 1993 was not available for Army officers. Data for these years was available for the entire Command and General Staff Officer Course and included all services. Data for all services could not be used because all services do not have a Cooperative Degree Program. Army officers who did not possess a master's degree were needed for this subproblem because the Army is the only service that has a Cooperative Degree Program. This data was not available for 1989 through 1993. The number of Army officers without a master's degree assigned to the Army Command and General Staff Officer Course was available for the years 1994 and 1995.<sup>27</sup>

Ernest Lowden, Ed.D., Office of Evaluation and Standardization, Army Command and General Staff College, stated that "the demographics

for Army officers attending the Command and General Staff Officer Course have not changed significantly for the last seven years."<sup>28</sup> Dr. Lowden recommended that the researcher "determine the percentage of Army officers that were assigned to the Command and General Staff Officer Course during 1994 and 1995 that did not have a master's degree and then apply the percentage to the average number of army officers assigned to the Command and General Staff Officer Course from 1989 through 1993."<sup>29</sup>

After obtaining the percentage of Army officers that did not have a master's degree when assigned to the Command and General Staff Officers Course from 1994 through 1995, the percentage was multiplied times the average number of Army officers that attended the Command and General Staff Officer Course from 1989 through 1993.<sup>30</sup> In most cases, officers who enter a Cooperative Degree Program do not have a master's degree. Screening estimated how many officers might have been able to apply for the Army Cooperative Degree Program from 1989 through 1993.

How the Data Was Interpreted. Appendix B includes the primary data used for this subproblem. All numbers were added together by category and divided to obtain yearly arithmetic means for the period of 1989 through 1993. Data for 1994 and 1995 was used<sup>31</sup> to determine the percentage of Army officers assigned to the Command and General Staff Officer Course without a master's degree. The percentage of Army officers assigned without a master's degree was multiplied times the average number of Army officers assigned to the Command and General Staff Officer Course<sup>32</sup> to estimate the average number of Army officers

that did not possess a master's degree while assigned to the Command and General Staff Officer Course from 1989 through 1993.

The average number of Army Cooperative Degree Program graduates<sup>33</sup> was divided by the average number of Army officers assigned to the Command and General Staff Officer Course from 1989 through 1993 that did not possess a master's degree prior to intermediate-level school to determine the percentage of Army officers that completed the Cooperative Degree Program.

The percentage of Army officers that completed the Cooperative Degree Program<sup>34</sup> was multiplied by the number of Marine Corps officers assigned to the Command and Staff College who did not possess a master's degree while assigned to intermediate-level school<sup>35</sup> to estimate the number and percentage of Marine Corps officers who might have applied for and entered a Cooperative Degree Program in association with Marine Corps Command and Staff College each year from 1989 through 1993.

The estimated number of Marine Corps officers who might have applied for and entered a Cooperative Degree Program was added to the number of officers that attended intermediate-level school.<sup>36</sup> This number was then divided by the number of officers that attended intermediate-level to determine the potential yearly increase in the percentage of Marine Corps officers in intermediate-level school due to a theoretical Cooperative Degree Program from 1989 through 1993. The acceptable increase was defined as a five percent or smaller increase in the number of Marine Corps officers assigned to intermediate-level school at the end of each fiscal year.

How the Results of Analysis Were Shown. Tables were used to show yearly averages and calculations for the populations shown in Appendix B.

Restatement of Subproblem Three. Is a Cooperative Degree Program in association with Marine Corps Command and Staff College feasible?

Information Needed. The information needed to answer subproblem three included: (a) a listing of the Marine Corps master's degree billets for majors and lieutenant colonels that require a systems management degree;<sup>37</sup> (b) Naval Postgraduate School Systems Management curriculum descriptions;<sup>38</sup> (c) American Council on Education graduate-level course equivalent credit recommendations for Marine Corps Command and Staff College;<sup>39</sup> (d) master's degree and curriculum descriptions from two colleges in northern Virginia that offer a nontechnical systems management degrees;<sup>40</sup> (e) the curriculum description for the Marine Corps Command and Staff College;<sup>41</sup> and, (f) approval or disapproval of a theoretical Cooperative Degree Program in association with civilian colleges near the Command and Staff College by college officials.<sup>42</sup>

Location of the Information. The required information was located in Table 4, Chapter 4, the 1994 Naval Postgraduate School Catalog, the 1994 American Council on Education Guide to the Evaluation of Educational Experiences in the Armed Services, graduate catalogs from two colleges in the northern Virginia area that offer a systems management master's degree, directories and guides to graduate

professional programs, and the Marine Corps Command and Staff Syllabus of Instruction.

Means of Obtaining the Information. The American Council on Education Guide was ordered from Oryx Press and received in December, 1994. Facsimile telephone requests to colleges near Quantico, the Naval Postgraduate School, the Command and Staff College, and civilian colleges were used to obtain bulletins and catalogs concerning postgraduate courses of study and curriculum descriptions. Graduate school guides<sup>43</sup> and directories<sup>44</sup> were obtained from the Combined Arms Research Library, Army Command and General Staff College, Fort Leavenworth, Kansas.

How the Information Was Screened. Master's degree positions listed in Table 4, Chapter 4, were screened for billets that have at least four major/lieutenant colonel positions. Billet titles were compared with Naval Postgraduate School curriculum numbers<sup>45</sup> to determine what billets might be filled by officers who completed a systems management master's degree. Next, Headquarters Marine Corps Billet Sponsors were requested to compare a generic systems management curriculum with the prerequisites for their specific master's degree position. Screening ensured that a potential Cooperative Degree Program would provide graduates with the qualifications to supplement the fully funded Special Education and Advanced Degree Programs.

A college directory<sup>46</sup> and a guide to professional programs<sup>47</sup> were screened for colleges in the vicinity of Quantico, Virginia that offered a systems management degree. College brochures and catalogs



from colleges offering a systems management master's degree<sup>48</sup> in the northern Virginia area were screened to determine tuition costs and courses of study for institutions that could potentially accept six or more hours of graduate-level credit from the Marine Corps Command and Staff College.

How the Information Was Interpreted. Systems management graduate fields of study at colleges near Quantico, Virginia with course work similar to instruction received at the Marine Corps Command and Staff College were analyzed with the American Council on Education Guide,<sup>49</sup> Naval Postgraduate School<sup>50</sup> and Command and Staff College catalogs.<sup>51</sup> Comparing the course work and tuition costs for graduate programs allowed the researcher to determine what two colleges to consider for a potential Marine Corps Cooperative Degree Program in association with the Command and Staff College to fill systems management billets.

Next, letters were sent to the two colleges describing a potential Cooperative Degree Program outlining the requirements of the program and requesting acceptance of at least six hours of transfer credit for Command and Staff College course work toward a systems management degree. Copies of the letters are in Appendices E and F. College officials were requested to approve the researcher's theoretical program. They were not requested to commit to an actual Cooperative Degree Program with the Marine Corps Command and Staff College.

The researcher did not have the authority to engage in formal negotiations, agreements, or contracts on behalf of the Marine Corps

Command and Staff College. The Marine Corps would conduct its own negotiations and agreements for an actual Cooperative Degree Program. Responses from college officials were analyzed to determine the feasibility of a Cooperative Degree Program with at least one civilian college near Quantico, Virginia. The researcher only considered systems management degrees for a potential Cooperative Degree Program.

How the Results of Analysis Were Shown. Tables were used to show high density systems management billets (requiring four or more majors/lieutenant colonels) and to compare the tuition costs and curriculum for colleges that offer a systems management degree near Quantico, Virginia.

### Literature

Indexes, databases and the On-line Card Catalog at the Combined Arms Research Library, Army Command and General Staff College and the On-line Marine Card Catalog, Breckenridge Library, Marine Corps Research Center, were used to complete Chapter 2, Literature Review.

Articles concerning military education published during the last five years were reviewed. More than twenty-five articles have been written since 1989 that relate to the professional education of officers. Articles published prior to 1989 were footnoted in several of the reviewed articles. Other relevant articles prior to 1989 were screened for value to the research.

Current Military & Political Literature and the Air University Library Index to Military Periodicals were the primary guides for journal and magazine articles that directly related to the research.

Approximately forty percent of the articles were written by or about Marine Corps officer professional education.

Computer software aided in the location of congressional records, newspaper and educational magazine articles, and technical reports. Key words used to locate information concerning the thesis question included: military, master(s) degree, postgraduate, education, and officer(s).

Proquest General Periodicals On Disc and the Infotrac Magazine and National Newspaper Index software were used to locate six articles. These information sources used key words and provided abstracts to focus the search to relevant articles. All articles were available on microfilm.

The Congressional Master File, published by the Congressional Information Service, Washington, D.C., provided information concerning committees, debates, and legislation that discussed the education of officers. The House Armed Services Committee convened a panel on military education in 1987. The Report of the Panel on Military Education, published in 1989, was not relevant to the thesis question. The results of the panel were directed at improving the quality of education at intermediate and senior-level military schools.

The Education Resources Information Center (JAN 1992-JUN 1994) and the National Technical Information Service (JAN 1990-MAY 1994) databases located three documents relative to the question. These documents were retrieved through an inter-library loan and are included in the bibliography.

Extensive reports concerning each military services self-evaluation of the intermediate-level schools were reviewed. The reports facilitated joint service accreditation of each school's curriculum. The reports discuss the status of the intermediate-level schools, but little is mentioned about postgraduate degree-granting programs like the Cooperative Degree Program researched in this thesis.

#### How the Problem Statement Was Answered

Data from the subproblems was analyzed in Chapter 4 and conclusions were determined in Chapter 5 of this thesis. Additional recommendations for each subquestion were discussed in detail. Recommendations for future research concerning master's degrees and the needs of the Marine Corps were included as recommendations in Chapter 5. A recommendation as to whether or not the Marine Corps should offer a Cooperative Degree Program to its officers was summarized in the conclusions made in this thesis.

### Endnotes

<sup>1</sup>Department of the Navy, Headquarters United States Marine Corps, Roster of Special Education and Advanced Degree Program Billets (Washington, D.C.: Department of the Navy, 4 August 1994), 36.

<sup>2</sup>Facsimile letter to Brian Hearnberger, from William Franchi, Headquarters United States Marine Corps Regular Officer Procurement Director, Washington, D.C., 2 November 1994.

<sup>3</sup>Department of the Navy, Headquarters United States Marine Corps, List of Marine Officers With Master's Degrees, By Major Subject Code (Washington, D.C.: Department of the Navy, 1 September 1994), 1-11.

<sup>4</sup>Department of the Navy, Naval Postgraduate School Catalog, Academic Year 1994 (Monterey, CA: Naval Postgraduate School, 1994), 15-16.

<sup>5</sup>Paul D. Leedy, Practical Research (New York: MacMillan, 1989), 173.

<sup>6</sup>Facsimile letter to Brian Hearnberger, from Joel Strout, Army Personnel Command Cooperative Degree Program Manager, Arlington, VA, 21 October 1994.

<sup>7</sup>Facsimile letter to Brian Hearnberger, from Linda Rohler, Marine Corps Command and Staff College Registrar, Quantico, VA, 30 November 1994.

<sup>8</sup>Educational Testing Service, The Official GRE/CGS Directory of Graduate Programs, Volume A: Natural Sciences (Princeton, NJ: Educational Testing Service, 1993), 164-171.

<sup>9</sup>Department of the Navy, Headquarters United States Marine Corps, Special Education and Advanced Degree Program Billets.

<sup>10</sup>Facsimile letter to Brian Hearnberger, from Chad Lienau, Headquarters United States Marine Corps Special Education Program Coordinator, Washington, D.C., 30 September 1994.

<sup>11</sup>Department of the Navy, Headquarters United States Marine Corps, Marine Officers With Master's Degrees.

<sup>12</sup>Department of the Navy, Headquarters United States Marine Corps, Special Education and Advanced Degree Program Billets, 1-36.

<sup>13</sup>Department of the Navy, Headquarters United States Marine Corps, Marine Officers With Master's Degrees.

<sup>14</sup>Department of the Navy, Headquarters United States Marine Corps, Special Education and Advanced Degree Program Billets, 36.

<sup>15</sup>Facsimile letter, William Franchi.

<sup>16</sup>Department of the Navy, Headquarters United States Marine Corps, Special Education and Advanced Degree Program Billets, 1-36.

<sup>17</sup>Facsimile letter, William Franchi.

<sup>18</sup>Department of the Navy, Headquarters United States Marine Corps, Marine Officers With Master's Degrees.

<sup>19</sup>Department of the Navy, Naval Postgraduate School Catalog, 112-144.

<sup>20</sup>Department of the Navy, Headquarters United States Marine Corps, Marine Officers With Master's Degrees.

<sup>21</sup>Department of the Army, Army Command and General Staff College, United States Army Command and General Staff College Statistics for 1989-1993 (Fort Leavenworth, KS: Army Command and General Staff College Registrar, 21 November 1994), 1-7.

<sup>22</sup>Facsimile letter, Joel Strout.

<sup>23</sup>Department of the Navy, Marine Corps University, Command and Staff College, Command and Staff College Statistical Information, 1979-1995 (Quantico, VA: Command and Staff College Registrar, 30 November 1994), 2-3.

<sup>24</sup>Ibid.

<sup>25</sup>Ibid.

<sup>26</sup>Department of the Army, Army Command and General Staff College, Army Command and General Staff College Statistics for 1989-1993.

<sup>27</sup>Department of the Army, Army Command and General Staff College, United States Army Command and General Staff College Statistics for 1994-1995 (Fort Leavenworth, KS: Army Command and General Staff College Class Directors Office, 7 December 1994), 1.

<sup>28</sup>Personal interview with Ernest G. Lowden, Ed.D., Program Evaluator, Office of Evaluation and Standardization, Army Command and General Staff College, Fort Leavenworth, KS, 13 January 1995.

<sup>29</sup>Ibid.

<sup>30</sup>Department of the Army, Army Command and General Staff College, Army Command and General Staff College Statistics for 1989-1993.

<sup>31</sup>Department of the Army, Army Command and General Staff College, Army Command and General Staff College Statistics for 1994-1995.

<sup>32</sup>Department of the Army, Army Command and General Staff College, Army Command and General Staff College Statistics for 1989-1993.

<sup>33</sup>Facsimile letter, Joel Strout.

<sup>34</sup>Ibid.

<sup>35</sup>Department of the Navy, Marine Corps University, Command and Staff College, Command and Staff College Statistical Information, 1979-1995.

<sup>36</sup>Ibid.

<sup>37</sup>Table 4, Chapter 4.

<sup>38</sup>Department of the Navy, Naval Postgraduate School Catalog.

<sup>39</sup>American Council on Education, The 1994 Guide to the Evaluation of Educational Experiences in the Armed Services: Air Force, Coast Guard, Department of Defense, and Marine Corps (Washington, D.C.: American Council on Education, 1994), 1-137.

<sup>40</sup>Capitol College, Graduate School of Systems Management, Master of Science in Systems Management Degree Program, 1992-1994 Bulletin (Laurel, MD: Capitol College, 1992), 10-13. Florida Institute of Technology, General Information and Descriptions of Florida Institute of Technology Off-Campus Graduate Programs (Melbourne, FL: Florida Institute of Technology, September 1994), 67-68.

<sup>41</sup>Department of the Navy, Marine Corps University. Command and Staff College Syllabus of Instruction, Academic Year 1994-1995. Quantico, VA: Marine Corps University, 1994), 2-6.

<sup>42</sup>Letter to Brian Hearnberger, from George J. Ellis, Ph.D., Capitol College Graduate School of Systems Management Academic Director, Laurel, MD, 14 March 1995. Letter to Randy Cullum, Director of Student Service, Florida Institute of Technology Off-Campus Programs Office, from Dr. Lee S. Dewald Sr., Florida Institute of Technology Graduate Program Director, Fort Lee Campus, VA, 28 March 1995.

<sup>43</sup>Educational Testing Service, Graduate Programs.

<sup>44</sup>Peterson's, Peterson's Guide to Graduate and Professional Programs: An Overview, 1995 (Princeton, NJ: Peterson's Guides, 1995), 76, 123.

<sup>45</sup>Department of the Navy, Naval Postgraduate School Catalog, 15-17.

<sup>46</sup>Educational Testing Service, Graduate Programs.

<sup>47</sup>Peterson's, Graduate and Professional Programs.

<sup>48</sup>American University, Graduate Programs (Washington, D.C.: American University, 1995), 16-17. Capitol College, Systems Management Degree Program. Florida Institute of Technology, Off-Campus Graduate Programs, 4-5, 67-68. George Mason University, Graduate Catalog, 1994-1996 (Fairfax, VA: George Mason University, 1994), 182-184, 202-205.

<sup>49</sup>American Council on Education, Evaluation of Educational Experiences in the Armed Services.

<sup>50</sup>Department of the Navy, Naval Postgraduate School Catalog, 112-144.

<sup>51</sup>Department of the Navy, Marine Corps University, Command and Staff College Syllabus.



## CHAPTER 4

### ANALYSIS

#### Introduction

The research methodology for this paper was designed to determine whether or not a Cooperative Degree Program would benefit the Marine Corps and should be offered to its officers. The purpose of a Cooperative Degree Program would be to augment the Special Education and Advanced Degree Programs by filling additional nontechnical master's degree billets in the Marine Corps. The research relied heavily on current and historical data. The data was compiled and presented in tables and graphs located in this chapter and the Appendices. The results of this research may assist the Marine Corps to determine if a Cooperative Degree Program should be offered to officers attending intermediate-level school at the Command and Staff College, Quantico, Virginia. The Program evaluated in this paper would be limited to officers completing a Cooperative Degree Program in association with Marine Corps Command and Staff College. Expanding the program to additional intermediate-level schools was not considered.

Each hypothesis was analyzed individually. The task of accepting or rejecting the respective hypothesis was accomplished once the applicable data had been associated with the appropriate hypothesis and the results fully analyzed.

### The First Hypothesis

The first hypothesis was that the Marine Corps Special Education and Advanced Degree Programs fail to fill the officer positions requiring a master's degree. The data supported the argument that the fully funded master's degree programs do not fill all the positions.

Analysis of the Data. In order to determine if the fully funded Special Education and Advanced Degree Programs fill the master's degree positions, all billets were compiled. Table 1 is a summary of the 406 master's degree billets currently in the Marine Corps.<sup>1</sup>

TABLE 1

#### MARINE CORPS MASTER'S DEGREE POSITIONS

Special Ed & Advanced Degree	393
+ Marine Officer Instructors	13
Total	406

A total of 92 school assignments are funded each year, 77 Special Education and 15 Advanced Degree Program positions.<sup>2</sup> The average tour of duty for master's degree positions is three years. The annual number of school assignments for the Special Education and Advanced Degree Programs were multiplied times three to determine the total number of positions that are filled every three years. The fully funded Special Education and Advanced Degree Programs are capable of filling 276 master's degree billets as indicated in Table 2.

TABLE 2

## FUNDED SCHOOL ASSIGNMENTS FOR MASTER'S DEGREES

Yearly Assignments	92
x Avg Years Per Position	3
Total	276

There are 130 master's degree positions that are not filled by the fully funded programs. See Table 3. It was not surprising to find that the fully funded programs cannot meet the master's degree needs of the Marine Corps. These programs are expensive and keep approximately 276 officers in school for two or more years. They require Headquarters Marine Corps to predict the master's degree positions that must be filled four years before an officer is assigned to a billet to allow for selection boards and 1 1/2 or more years of postgraduate study.

TABLE 3

## POSITIONS NOT FILLED BY FUNDED SCHOOL ASSIGNMENTS

Requiring a Master's Degree	406
- Funded School Assignments	276
Total	130

Cooperative Degree Programs are designed to limit the number of additional officers that are in a training status. By taking advantage

of the time an officer spends at intermediate-level school to obtain partial credit toward a civilian master's degree, the additional number of officers that are in a training status is limited. While assigned to the Command and Staff College, an officer enrolled in a potential Cooperative Degree Program would receive twelve hours credit toward a civilian master's degree. Six hours of graduate credit would be awarded for completion of the standard military courses and an additional six hours would be awarded for completion of two civilian courses in conjunction with Command and Staff College.

The number of officers required for each rank and military occupational specialty (billet description) was compiled from a list of Marine Corps master's degree positions<sup>3</sup> and is summarized in Table 4. Many of the military occupational specialties are similar. Data System Specialist, Management-Data System Officer, Computer Engineer, and Communications Engineer appear to be closely related. Data systems officers have the largest number of positions (64), followed by financial management specialists (48), data system specialists (46), and operations analysts (36). There are 28 different master's degree specialties in the Marine Corps.

More than half of the positions (219) are for majors. There are also 70 lieutenant colonel positions. Graduates of Marine Corps Command and Staff College are majors or newly promoted lieutenant colonels, eligible by rank for 289 (71.2 percent) of the 406 master's degree billets.

TABLE 4

## MARINE CORPS MASTER'S DEGREE POSITIONS

MOS	Title	Capt	Maj	Ltcol	Col	Total by MOS
9602	Education Off		5	5		10
9620	Aeronautical Eng		3			3
9622	Chemical Eng		1			1
9624	Electronics Eng	10	15	2		27
9626	Ordnance Sys Eng		3			3
9628	Computer Eng		2			2
9630	Industrial Eng	4	4	1	1	10
9631	Environmental Eng	2	5		1	8
9632	Nuclear Eng		2			2
9634	Electronic WF S Eng	1	1			2
9636	Communications Eng	1	4	2		7
9640	Manpower Mgmt Off	1	15	4		20
9644	Financial Mgmt Spc	2	12	15	19	48
9646	Data Sys Spc	19	23	3	1	46
9648	Mgmt, Data Sys Off	16	33	14	1	64
9650	Operations Anal	5	24	7		36
9652	Defense Sys Anal	2	8	5		15
9656	Contracting Off	7	13			20
9657	Sys Acq Mgmt Off	1	4			5
9658	C3 Sys Off	3	6	3		12
9662	Material Mgmt Off	2	7	1		10
9666	Space Ops Off	3	3	2		8
9670	Statistics Off	1	2			3
9674	PA Mgmt Off		2	2	1	5
9676	Internat Rel Off	1	2	1		4
9678	Historian	2	1	1		4
9688	Master of Law	1	15	2		18
9910	Marine Off Instr		4		9	13
Subtotals by Rank		84	219	70	33	
Total Positions						406

Headquarters Marine Corps provided a list of 2,498 Marine Corps officers that had a master's degree as of 1 September 1994.<sup>4</sup> The list had 115 different degree titles and 2 unknown titles. The complete unedited list is included as Appendix A of this paper. Degree titles did not correspond with the 28 Marine Corps master's degree billet descriptions shown in Table 4.

Degree titles were grouped to correspond with Naval Postgraduate School department titles.<sup>5</sup> Table 5 shows 44 degrees that are similar to 6 Naval Postgraduate School degrees. Grouping the degree titles enabled the researcher to compare the status of majors and lieutenant colonels relative to the 289 master's degree positions for these ranks. Degree titles listed with a total of zero indicate that there are captains with the degree who might qualify for a master's degree billet. Of the 1,605 majors and lieutenant colonels, 1,048 (65.3 percent) have degree titles similar to Naval Postgraduate School degrees. Some of the 1,048 officers listed are currently in the 289 major and lieutenant colonel master's degree positions.

TABLE 5

CURRENT DEGREE DESCRIPTIONS GROUPED  
BY NAVAL POSTGRADUATE SCHOOL DEPARTMENT TITLES

NPS Curriculum						
Code	USMC Degree Description	Maj	Ltc ol	Qty	Dept	Qty
Aeronautical Engineering						14
31	Aeronautical Eng	1	3	4		
15	Aeronautics	6	2	8		
H2	Aerospace Eng			0		
N2	Aviation Maint Tech	2		2		
Computer Tech						69
M4	Computer Eng			0		
E7	Computer Science	28	18	46		
M5	Computer Science(Tech)	18	5	23		
Q5	Data Processing			0		
Electronics and Comm						49
G9	Communications	6		6		
34	Communications Eng		1	1		
F1	Communication Mgmt	5	3	8		
30	Electronics	1		1		
35	Electrical Eng	15	15	30		
D8	Electrical Eng	2	1	3		
National Security and Intel						81
L6	Arabic Studies			0		
G1	Asiatic Studies	1		1		
C5	Foreign Service			0		
H0	International Affairs	6	4	10		
56	International Relations	19	44	63		
D0	Latin America Studies	4	1	5		
F9	Russian Studies	1	1	2		

NPS Curriculum						
Code	USMC Degree Description	Maj	Ltc ol	Qty	Dept	Qty
Operations Analysis						68
M3	Applied Math	3	2	5		
M2	Defense Sys Anal	10	8	18		
64	Mathematics	2	3	5		
D9	Operations Anal	1	6	7		
G4	Operations Research	21	10	31		
88	Statistics		2	2		
Systems Management						767
13	Accounting	4	3	7		
N6	Administration	12	8	20		
G0	Aviation Mgmt	2		2		
22	Business Admin	161	118	279		
N8	Business Mgmt	66	48	114		
K5	Finance	1	2	3		
G2	Financial Mgmt	9	6	15		
D1	General Mgmt	10	11	21		
J0	Graduate Logistics			0		
T6	Human Resource Mgmt	30	40	70		
L9	Logistics Mgmt	13	2	15		
E5	Management Eng	5	2	7		
N0	Management Info Sys	25	18	43		
D6	Personnel Mgmt	10	8	18		
M7	System Inventory Mgmt		1	1		
N5	Systems Mgmt	75	73	148		
M8	Techniques of Mgmt	1	3	4		
Subtotals		576	472			
Total Positions						1,048

There are several Marine Corps master's degree position descriptions in the category of systems management. An example is: Manpower Management Officer, MOS 9640, has nineteen positions for



majors and lieutenant colonels<sup>6</sup> that could be filled by an officer with a nontechnical, systems management degree. Many of the 767 officers with a similar degree could fill systems management billets.

With few exceptions such as the thirteen Marine Officer Instructor positions<sup>7</sup> requiring a master's degree, the Marine Corps fills master's degree billets with graduates of the Special Education and Advanced Degree Programs.

Results. The Special Education and Advanced Degree Programs do not fill all of the master's degree requirements of the Marine Corps. There are many officers with nontechnical degrees that should be screened for master's degree billets to augment the fully funded programs. The Marine Corps should not have to send officers to a fully funded Special Education or Advanced Degree Program for most systems management degrees and other nontechnical degrees.

#### The Second Hypothesis

The second hypothesis was that a Cooperative Degree Program will have an acceptable effect on officer manning levels thus allowing the Marine Corps to benefit from such a program. Acceptable was defined as a 5 percent or smaller increase in the number of Marine Corps officers assigned to intermediate-level school at the end of each fiscal year. The data from an experimental Marine Corps Cooperative Degree Program population resulted in a 5.5 percent increase in officers (11) assigned to intermediate-level school. Based on the 5 percent maximum, 10 officers could have been assigned to a potential Cooperative Degree Program from 1989 through 1993.

Analysis of the Data. In order to determine how a Cooperative Degree Program would affect the Marine Corps, the increase in the number of officers in a training status for intermediate-level school had to be measured. Officers enrolled in a Cooperative Degree Program would be retained in a training status for up to eleven months<sup>8</sup> after Command and Staff College in order to complete the program. The Marine Corps would determine how many Cooperative Degree Program positions to offer majors and lieutenant colonels assigned to the Command and Staff College.

To estimate how many officers might be enrolled in a Cooperative Degree Program, statistics for Army officers assigned to the Command and General Staff Officer Course,<sup>9</sup> Fort Leavenworth, Kansas, were related to Marine Officers assigned to the Command and Staff College,<sup>10</sup> Quantico, Virginia from 1989 through 1993. While it is true that the Marine Corps would be the final authority for determining the number of quotas for a Cooperative Degree Program, the calculations below provide a frame of reference for analysis of subproblem two. All calculations were rounded to two decimal points and percentages were shown as whole numbers.

First, yearly arithmetic means for categories of Army and Marine Corps officers assigned to their respective intermediate-level schools were determined. Appendix B shows all data used to solve this subproblem in Tables 12 through 15. Five-year data was available for all categories except for Army Officers assigned to the Command and General Staff Officer Course that did not have a master's degree. Army officers without a master's degree comprised forty-nine percent of all

Army officers assigned to the Command and General Staff Officer Course from 1994 and 1995.<sup>11</sup> See Table 12.

As noted in Chapter 3, the demographics for Army officers assigned to the Command and General Staff Officer Course have been consistent for the past seven years. Table 6 shows a mean estimate of 444 Army officers without a master's degree were assigned to the Command and General Staff Officer Course from 1989 through 1993.

TABLE 6

AVERAGE NUMBER OF ARMY OFFICERS ASSIGNED TO THE COMMAND  
AND GENERAL STAFF OFFICER COURSE THAT DID NOT HAVE A MASTER'S DEGREE

Yearly Avg Number of Army Officers	907
X Avg Percent Without a Master's Degree	49%
Yearly Avg Number Without a Master's Degree	444.43

Next, the percentage of eligible Army officers that completed a Cooperative Degree Program had to be determined. See Table 13. Dividing the average number of Cooperative Degree Program graduates by the yearly average number of Army officers assigned to the Command and General Staff Officer Course that did not possess a master's degree equals fourteen percent as indicated in Table 7.

TABLE 7

PERCENTAGE OF ELIGIBLE ARMY  
OFFICERS COMPLETING A COOPERATIVE DEGREE PROGRAM

Avg Number of Coop Graduates	62
÷ Yearly Avg Number Without a Master's Degree	444.43
Percentage of Army Officers Completing a Coop	14%

The number of Marine Corps officers assigned to the Command and Staff College from 1989 through 1993 (Table 14) that might have completed a program similar to the Army Cooperative Degree Program was determined in Table 8. By applying the same percentage derived from statistics for Army officers attending the Command and General Staff Officer Course during the same period, it was estimated that eleven (11.48 rounded down) Marine Corps officers might have been enrolled in a Cooperative Degree Program.

TABLE 8

ESTIMATED NUMBER OF MARINE OFFICERS THAT  
MIGHT HAVE BEEN ENROLLED IN A COOPERATIVE DEGREE PROGRAM

Percentage of Army Officers Completing a Coop	14%
X Avg Number of Marine Off Eligible for Coop	82
Estimated Marine Officers in a Coop Program	11.48

The yearly mean number of Marine Corps Officers that attended an intermediate-level school from 1989 through 1993 was 190.<sup>12</sup> See

Table 15. By adding the estimated number of officers in a potential Cooperative Degree Program to the average number of officers attending intermediate-level school, it was determined that there would have been an average of 201 officers in school from 1989 through 1993. As shown in Table 9, there would have been an estimated 5.5 percent increase (11 officers) in the intermediate-level school population had there been an equal percentage of Marine Corps officers enrolled in a Cooperative Degree Program from 1989 through 1993.

TABLE 9

POTENTIAL YEARLY INCREASE IN THE  
NUMBER OF MARINE CORPS OFFICERS ASSIGNED TO  
INTERMEDIATE-LEVEL SCHOOL DUE TO A COOPERATIVE DEGREE PROGRAM

Estimated Marine Officers in a Coop Program	11
+ Avg Marine Officers in ILS	190
Estimated Marine Officers in ILS with a Coop Program	201
Estimated Marine Officers in a Coop Program	11
÷ Estimated Marine Officers in ILS with a Coop Program	201
Potential Percentage Increase Due to a Coop Program	5.5%

Results. A Cooperative Degree Program would have resulted in an additional eleven Marine Corps officers retained in a training status. This percentage is based on a comparison of five-year data for Army officers attending the Command and General Staff Officer Course and related to Marine Corps Officers assigned to the Command and Staff College during the same period.

If a potential Marine Corps Cooperative Degree Program were limited to five percent of the intermediate-level school population, a maximum of ten officers could be enrolled in a Cooperative Degree Program. This number is based on 1989 through 1993 demographics. The Marine Corps would have to determine the number of Cooperative Degree Program positions to offer.

### The Third Hypothesis

The third hypothesis was that a theoretical Cooperative Degree Program in association with Marine Corps Command and Staff College would be agreed to by at least one college or university near Quantico, Virginia. Capitol College and the Florida Institute of Technology agreed to accept six semester hours of transfer credit for the standard Command and Staff College program.

Analysis of the Data. In order to determine if a Cooperative Degree Program was feasible within the scope of this research, systems management billets for majors/lieutenant colonels had to be determined from the complete list of Marine Corps master's degree positions in Table 4 of this chapter. Table 10 lists master's degree positions that are filled by officers who complete a Systems Management Degree at Naval Postgraduate School. Systems Management degrees have 800 series curriculum numbers<sup>13</sup> shown in the right-hand column of Table 10. There are sixty-five systems management positions for majors and lieutenant colonels filled by officers that have completed Naval Postgraduate School. The curricula objectives and descriptions for these billets are listed in Appendix C.

TABLE 10

## MARINE CORPS SYSTEMS MANAGEMENT POSITIONS

MOS	Title	Maj	ol Ltc	Total by MOS	NPS #
9640	Manpower Mgmt Off	15	4	19	847
9644	Financial Mgmt Spc	12	15	27	837
9652	Defense Sys Anal	8	5	13	817
9656	Contracting Off	13		13	815
9657	Sys Acq Mgmt Off	4		4	817A
9662	Material Mgmt Off	7	1	8	827
Subtotals by Rank		59	25		
Total Positions				65	

Next, Headquarters Marine Corps billet sponsors for the military occupational specialties (MOS) listed in Table 10 reviewed the generic curriculum listed in Appendix D to determine if potential graduates of a civilian college systems management degree would be qualified to fill Marine Corps master's degree positions, supplementing the fully funded Special Education and Advanced Degree Programs.

Billet sponsors are responsible for evaluating the educational requirements for their area of expertise. All evaluators had a secondary military occupational specialty for the billet they sponsored. Billet sponsors forward actual curriculum evaluations to the Marine Corps Special Education Program Coordinator who recommends approval or disapproval to the Deputy Chief of Staff for Manpower. The Deputy Chief of Staff for Manpower was not requested to approve this theoretical program.

As expected, all sponsors preferred a graduate of the Naval Postgraduate School over a Cooperative Degree Program graduate. Since the Cooperative Degree Program would supplement the existing fully funded master's degree programs, there was no conflict between the postgraduate programs.

Most sponsors stressed the value of the thesis they completed as part of the Naval Postgraduate School curriculum. Directed research prepares students to tackle large problems using a formal approach. Problem solving skills learned through directed research at a civilian college and/or Command and Staff College can substitute for some of the theoretical systems management curriculum.

Sponsors for Manpower Management Officers, Defense Systems Analysts, Systems Acquisition Management Officers, and Material Management Officers agreed that the systems management curriculum would qualify officers for their military occupational specialties. Billets for these positions account for 34 of the 65 Marine Corps systems management positions. Each sponsor mentioned two or three military specific courses they thought should be included in the training required for their military occupational specialty. Unfortunately, there are few military specific courses offered at civilian colleges. Deficiencies in a Cooperative Degree Program would have to be compensated through on-the-job training or attendance at Department of Defense training centers.

Sponsors for Financial Management Specialists and Contracting Officers said that the theoretical systems management curriculum would not qualify officers for their military occupational specialties.



These master's degree billets account for thirty-one of the Marine Corps systems management positions.

Because the Naval Postgraduate systems management curriculum (800 series) includes these positions, they were still considered for augmentation with the theoretical Cooperative Degree Program. However, the curriculum in Appendix D does not qualify officers for financial management or contract master's degree positions. Sponsors indicated there are Master's of Business Administration and Contract/Acquisition Management degrees offered in the Washington, D.C. area that could fulfill the majority of the requirements for degrees sponsored.

Like the other sponsors, they indicated military specific courses that should be included in the training required for their military occupational specialty. Again, on-the-job training or attendance at Department of Defense training centers could compensate for deficiencies. Courses for contracting must be certified as equivalent to mandatory courses by the Defense Acquisition University before they can substitute for acquisition requirements.

The Official GRE/CGS Directory of Graduate Programs<sup>14</sup> was screened for colleges near Quantico, Virginia that offer systems management master's degrees similar to those at the Naval Postgraduate School.<sup>15</sup> There were four colleges with this degree program near Quantico, Virginia. Table 11 shows the civilian colleges, tuition costs,<sup>16</sup> locations, and distance from Command and Staff College. Capitol College and the Florida Institute of Technology were selected for the theoretical Systems Management Cooperative Degree Program because their curriculum was most similar to the Naval Postgraduate

School. These colleges also offered the lowest tuition and held classes nearest the Command and Staff College.

TABLE 11

SYSTEMS MANAGEMENT DEGREES IN THE QUANTICO, VIRGINIA AREA

College	Tuition/Hr	Location	Dist to CSC
American Univ	571	Washington D.C.	35
Capitol Coll	344	Quantico, VA/ Falls Church, VA	1 30
Florida Tech	297	Alexandria, VA	24
George Mason Univ	450	Fairfax, VA	32

Capitol College offers classes on the Marine Corps Base in Quantico, at Falls Church, and other Virginia locations.<sup>17</sup> The main campus is located in Laurel, Maryland. Most of the systems management courses are held in Falls Church. An officer completing a Cooperative Degree Program through Capitol College would begin classes at Quantico, Virginia during Command and Staff College. After the military school, he would complete a systems management degree in Falls Church, Virginia or Laurel, Maryland.

Florida Institute of Technology offers systems management classes in Alexandria, Virginia. The university offers several focused systems management degree programs.<sup>18</sup> Five courses of the Master of Science for Contract and Acquisition Management curriculum are accredited by the Defense Acquisition University.<sup>19</sup> An officer completing a Cooperative Degree Program at the Florida Institute of Technology would complete classes in Alexandria, Virginia. The college

offered a Master's of Business Administration that could be used to provide additional officers for financial management master's positions.

Letters were sent to Capitol College and the Florida Institute of Technology requesting approval of a theoretical Cooperative Degree Program. Copies of the letters are located in Appendices E and F. The American Council on Education description and credit recommendations for the Marine Corps Command and Staff College<sup>20</sup> and the Command and Staff College Syllabus of Instruction<sup>21</sup> were used by college officials to evaluate the curriculum at the intermediate-level school. Appendix G shows the council's recommendations from the 1994 Education Guide. There are no true equivalencies for courses completed through different educational systems. College officials were requested to compare their curriculum with courses at the Command and Staff College and to "recognize" similar study as equivalent for graduate-level transfer credit.

George Ellis, Ph.D., Academic Counselor, Capitol College Graduate School of Systems Management, stated that "we would welcome participation in a cooperative degree program, and we would accept six semester hours of transfer credit for officers completing the USMC Command and Staff College program." See Appendix H. Transfer credit would be awarded for systems management electives. He also indicated that "depending on electives studied and the detailed nature of those electives, transfer credit might be awarded for a core course, SM-513, in lieu of an elective." Directed research could be used to develop problem-solving skills and equate to a core course if an officer

completed the Marine Corps Command and Staff College Master of Military Studies Program.

Dr. Lee Dewald, Sr., Florida Institute of Technology Graduate Program Director, Fort Lee Campus, Virginia, evaluated the Marine Corps Command and Staff College curriculum and recommended that transfer credit be granted for six hours of graduate courses. See Appendix I. Three hours would be awarded for a core course, BUS 5013, Organizational Behavior, and three hours for an elective, MAN 5010, Seminar in Research Methodology.

Dr. Dewald's response indicated that did not receive information concerning the electives program at the Command and Staff College. The researcher sent him a facsimile copy of elective course descriptions on 5 April 1995. Dr Dewald reviewed the descriptions and indicated that "Behavioral Factors in Management" was the most relevant Command and Staff College course.<sup>22</sup> For MAN 5010 to qualify as a Systems Management degree elective course, officers completing a Cooperative Degree Program would have to receive approval from the Dean of the School of Business. MAN 5010 could substitute for one of the five management elective courses offered to Systems Management students.<sup>23</sup>

Results. A Cooperative Degree Program with Capitol College and/or the Florida Institute of Technology is feasible. Whether or not a Cooperative Degree Program is started with these colleges, Marine Corps officers enrolled in one of the Graduate Schools of Systems Management can now receive six hours of transfer credit for completing the Command and Staff College resident course. Differences in the two graduate programs were negligible.

## Endnotes

<sup>1</sup>Department of the Navy, Headquarters United States Marine Corps, Roster of Special Education and Advanced Degree Program Billets (Washington, D.C.: Department of the Navy, 4 August 1994), 36. Facsimile letter to Brian Hearnberger, from William Franchi, Headquarters United States Marine Corps Regular Officer Procurement Director, Washington, D.C., 2 November 1994.

<sup>2</sup>Facsimile letter to Brian Hearnberger, from Chad Lienau, Headquarters United States Marine Corps Special Education Program Coordinator, Washington, D.C., 30 September 1994.

<sup>3</sup>Department of the Navy, Headquarters United States Marine Corps, Special Education and Advanced Degree Program Billets, 1-36.

<sup>4</sup>Department of the Navy, Headquarters United States Marine Corps, List of Marine Officers With Master's Degrees, By Major Subject Code (Washington, D.C.: Department of the Navy, 1 September 1994), 1-11.

<sup>5</sup>Department of the Navy, Naval Postgraduate School Catalog, Academic Year 1994 (Monterey, CA: Naval Postgraduate School, 1994), 15-16.

<sup>6</sup>Department of the Navy, Headquarters United States Marine Corps, Special Education and Advanced Degree Program Billets, 7-8.

<sup>7</sup>Facsimile letter, William Franchi.

<sup>8</sup>Department of the Army, U.S. Army Command and General Staff College, CGSC Circular No. 351-1, United States Army Command and General Staff College Catalog (Fort Leavenworth, KS: Department of the Army, July 1994), 75.

<sup>9</sup>Department of the Army, Army Command and General Staff College, United States Army Command and General Staff College Statistics for 1989-1993 (Fort Leavenworth, KS: Army Command and General Staff College Registrar, 21 November 1994), 1-7. Department of the Army, Army Command and General Staff College, United States Army Command and General Staff College Statistics for 1994-1995 (Fort Leavenworth, KS: Army Command and General Staff College Class Directors Office, 7 December 1994), 1.

<sup>10</sup>Department of the Navy, Marine Corps University, Command and Staff College, Command and Staff College Statistical Information, 1979-1995 (Quantico, VA: Command and Staff College Registrar, 30 November 1994), 2-3.

<sup>11</sup>Department of the Army, Army Command and General Staff College, United States Army Command and General Staff College Statistics for 1994-1995.

<sup>12</sup>Electronically mailed letter to Brian Hearnberger, from Gerald T. Dennis, Marine Manpower Officer Assignments Branch, Headquarters United States Marine Corps, Washington, D.C., 17 January 1995.

<sup>13</sup>Department of the Navy, Naval Postgraduate School Catalog, Academic Year 1994 (Monterey, CA: Naval Postgraduate School, 1994), 16.

<sup>14</sup>Educational Testing Service, The Official GRE/CGS Directory of Graduate Programs, Volume A: Natural Sciences (Princeton, NJ: Educational Testing Service, 1993), 164-171.

<sup>15</sup>Department of the Navy, Naval Postgraduate School Catalog.

<sup>16</sup>Peterson's, Peterson's Guide to Graduate and Professional Programs: An Overview, 1995 (Princeton, NJ: Peterson's Guides, 1995), 76, 123.

<sup>17</sup>Capitol College, Graduate School of Systems Management, Master of Science in Systems Management Degree Program, 1992-1994 Bulletin (Laurel, MD: Capitol College, 1992), 26.

<sup>18</sup>Florida Institute of Technology, General Information and Descriptions of Florida Institute of Technology Off-Campus Graduate Programs (Melbourne, FL: Florida Institute of Technology, September 1994), 4-5.

<sup>19</sup>Department of Defense, Office of the Under Secretary of Defense (Acquisition and Technology), Defense Acquisition University Catalog, 1994-1995 (Alexandria, VA: Defense Acquisition University, 1994), C-4.

<sup>20</sup>American Council on Education, The 1994 Guide to the Evaluation of Educational Experiences in the Armed Services: Air Force, Coast Guard, Department of Defense, and Marine Corps (Washington, D.C.: American Council on Education, 1994), 1-137.

<sup>21</sup>Department of the Navy, Marine Corps University, Command and Staff College Syllabus of Instruction, Academic Year 1994-1995 (Quantico, VA: Marine Corps University, 1994), 2-6.

<sup>22</sup>Telephone interview with Dr. Lee S. Dewald Sr., Florida Institute of Technology Graduate Program Director, Fort Lee Campus, VA, 10 April 1995.

<sup>23</sup>Florida Institute of Technology, General Information and Descriptions of Florida Institute of Technology Off-Campus Graduate Programs, 27, 68.

## CHAPTER 5

### CONCLUSION

#### Introduction

The analysis for this paper was designed to determine whether or not the Marine Corps needs to offer a Cooperative Degree Program in conjunction with the Command and Staff College, Quantico, Virginia. The evidence indicated that it is advisable for the Marine Corps to offer a Cooperative Degree Program to its officers. The study's objective was to determine if a Cooperative Degree Program should augment the existing postgraduate education programs.

The findings as reviewed in Chapter 4, upheld the first and third hypotheses. The Marine Corps needs additional officers with the qualifications to fill master's degree positions. There are existing master's degree programs at colleges in the Quantico, Virginia area that offer nontechnical master's degrees. These degrees could qualify officers to fill some of the sixty-five systems management billets for majors and lieutenant colonels when completed in association with Command and Staff College.

The findings did not uphold the second hypothesis because the experimental Marine Corps Cooperative Degree Program population yielded more than a 5 percent increase in the number of officers assigned to intermediate-level school. Granted, a 5.4 percent increase

(11 officers) is relatively close to the required 5 percent maximum. To stay within the limits of a 5 percent increase in the intermediate-level school population, no more than 10 officers could participate in a Cooperative Degree Program based on data from 1989 through 1993.

### Conclusions

The results of the research produced the conclusion that the Marine Corps may need to seriously consider beginning a Cooperative Degree Program to fill additional master's degree billets with qualified officers or reduce the number of positions requiring a specific master's degree. There are plenty of officers in the Marine Corps with a postgraduate degree, but the degree titles are dissimilar to the those required for master's degree billets. The needs of the Marine Corps are the foremost requirement of this program. A Cooperative Degree Program would fill specific master's degree positions.

A Cooperative Degree Program would not fill all of the master's degree positions that are currently filled with unqualified officers. The program would allow Headquarters Marine Corps to select officers to fill critical deficiencies left unsourced by the fully funded Special Education and Advanced Degree Programs. There are many Marine Corps master's degree billets filled with officers that only have a baccalaureate degree. If these billets truly merit an officer with postgraduate credentials, a Cooperative Degree Program would offset some of the qualified-officer shortfall for master's degree positions.



### Discussion

The average cost of a master's degree ranges from \$5,000 to \$10,000. Completing a master's degree in association with intermediate-level school helps reduce the expense undertaken by officers for a postgraduate education. This alone makes the program highly attractive. Officers would not only get a master's degree, but fill a critical position as well. Tuition assistance can be used to attend part-time college courses during the first year of a Cooperative Degree Program.

Although the research only considered a program in association with Marine Corps Command and Staff College, the Cooperative Degree Program established at the Army Command and General Staff could also be a means to fill additional Marine Corps master's degree billets. The existing program can accommodate additional officers. There are twenty Marine Corps officers assigned to the Army Command and General Staff College, Fort Leavenworth, Kansas, each year. These officers could be a source of additional Cooperative Degree students.

A new Cooperative Degree Program was started in November 1994 at the Army Engineer School, Fort Leonard Wood, Missouri, in association with the Engineer Officer Advance Course. This program awards successful officers with a Master of Science Degree in engineering management or environmental engineering for completion of the military school; part-time courses, and four months of full-time study at the University of Missouri-Rolla.

At least eight Marine Corps captains attend the Engineer Officer Advance Course each year. The University of Missouri master's degree

programs would qualify captains to fill Industrial Engineer, MOS 9630, and Environmental Engineer, MOS 9631, positions.

The discovery of this program led the researcher to consider expanding the theoretical Cooperative Degree Program to include captains. The sponsor for Industrial and Environmental Engineers indicated that Marine Corps officers completing the Engineer Officer Advance Course always report to Fleet Marine Force billets following graduation. The utilization tour for this Cooperative Degree Program could not begin until at least two to three years after completion of a Cooperative Degree Program. By this time, the officer would be eligible to fill one of nine master's degree positions for the rank of major.

#### Recommendations

One way to fill additional master's degree billets would be to screen the records of officers with a master's degree. This would be an extremely difficult task given that there are 115 degree titles and 28 master's degree billet descriptions. If the degree titles were grouped to correspond with Naval Postgraduate School Departments, sourcing additional officers that have the prerequisites to fill master's degree billets would be simplified. Not all of the degrees listed in Table 5 of Chapter 4 would qualify officers for master's degree positions. There are seventeen different degree descriptions that would have to be screened against the systems management curriculum to determine the true number of officers qualified for systems management master's degree positions. Many degrees would qualify for the nontechnical systems management curriculum. If the 115

degree titles were grouped by department, Headquarters Marine Corps would be able to use the list as a means of filling additional master's degree positions with officers that already have the appropriate degree.

The researcher recommends that if the Marine Corps does begin a Cooperative Degree Program, a limit should be placed on the number of officers enrolled in the program. Limiting the program to a certain number of officers would allow Headquarters Marine Corps to measure the effect of a Cooperative Degree Program on the Authorized Strength Report and the Officer Staffing Goal Model. Limiting the number of officers in the program would result in a consistent and acceptable effect. The researcher recommends that no more than five percent of the officers assigned to intermediate-level school be enrolled in a Cooperative Degree Program. The Marine Corps would have to determine what percentage or number of Cooperative Degree Program officers is acceptable.

Regardless of whether or not the Marine Corps offers a Cooperative Degree Program to its officers, the Command and Staff College should pursue formal recognition of transfer credit by civilian colleges near Quantico, Virginia and major bases such as Camp Lejeune, North Carolina and Camp Pendleton, California. Recognition of transfer credit for Command and Staff College courses would help officers complete a master's degree through off-duty education much sooner and conserve tuition assistance funding. Each civilian master's degree program is audited by college faculty members before transfer credit can be awarded. Recognition of the Command and Staff College by the

American Council on Education and the Federal degree-granting authority recently granted by Congress support the awarding of transfer credit toward a civilian master's degree.

If the Marine Corps begins a Cooperative Degree Program, billet sponsors should be committee members for directed research completed for the program. This will ensure that officers employ skills necessary for their future master's degree position. An internship of one year should be considered for officers with curriculum deficiencies before awarding a master's degree military occupational specialty.

Because the generic systems management degree does not qualify officers for contracting or financial management master's degree positions, a Cooperative Degree Program that includes all systems management degrees would have to be expanded beyond the limitations of this research. Additional civilian master's degrees such as computer science and electronics engineering are available in the northern Virginia area if a Cooperative Degree Program is expanded to include technical degrees. The researcher recommends limiting a Cooperative Degree Program to civilian master's degrees that are nontechnical allowing fully funded programs to focus on technical degrees.

#### Suggestions for Future Research

It is strongly suggested that related research be conducted to determine the validity of the 406 master's degree positions. Since a portion of the billets are not filled with officers possessing the postgraduate qualifications, the positions need to be prioritized to account for the shortage of qualified officers. Billet justifications are completed by master's degree military occupational specialty

sponsors every three years. These "in-house" justifications merit an external evaluation. An informal survey of the supervisors for master's degree billets would best suit the needs of such a project.

Future research should be conducted to simplify the classification of master's degrees in Marine Corps educational data bases. In its current form, the data in Appendix A has limited value. The degrees listed in Appendix A need primary, secondary, and tertiary categories for simplification. Grouping the degree descriptions in Table 5 of Chapter 4 was a starting point tied to Naval Postgraduate School department titles. The research should further seek to determine a system to enhance the input of standardized education codes and descriptions.

# APPENDIX A

## LIST OF MARINE OFFICERS WITH A MASTER'S DEGREE AS OF 1 SEPTEMBER 1994

Code	Degree Description	Lt	Capt	Maj	Ltcol	Col	Gen	Total
A2	Art	1	2	14	9	7		33
A3	Secondary Education		1	2				3
A5	Engineering		3	11	3	1		18
A8	Health		1	1				2
B0	Social Studies			1	1			2
B1	Industrial Relations		1	1				2
B7	Safety Eng					1		1
C1	Physical Science		1					1
C5	Foreign Service	1						1
C6	Naval Science				2			2
C8	Physics Eng		1					1
D0	Latin America Studies			4	1			5
D1	General Mgmt	1	5	10	11	11	1	39
D2	Humanities			2	1	1		4
D3	Natural Science			1				1
D6	Personnel Mgmt		4	10	8	8	1	31
D8	Electrical Eng		2	2	1	2		7
D9	Operations Anal		2	1	6	4		13
E5	Management Eng		3	5	2	3		13
E6	Ordnance System Eng				1			1
E7	Computer Science	2	9	28	18	7		64
E8	Engineering Admin					1	1	2
F1	Communication Mgmt		1	5	3	1		10
F2	Education Guidance Co		2	5	5	3		15
F4	Law Enforcement			1				1
F5	Education Psychology					1		1
F7	Education Curriculum		1	3	2	1	1	8
F9	Russian Studies			1	1			2

Code	Degree Description	Lt Capt	Maj	Ltcol	Col	Gen	Total
G0	Aviation Mgmt		1	2			3
G1	Asiatic Studies			1			1
G2	Financial Mgmt		7	9	6	9	31
G4	Operations Research		7	21	10	3	42
G9	Communications		1	6		1	8
H0	International Affairs	3		6	4	1	14
H2	Aerospace Eng		1			1	2
H3	Government Admin			1	1		2
H7	Juridical Science	1					1
H8	Criminal Law		2	1			3
J0	Graduate Logistics		1				1
J5	Management & Ind Eng			10	8	1	19
J9	Education Admin			2	3	3	9
K2	Building Science		1				1
K5	Finance			1	2		3
K6	Industrial Arts			1			1
K8	Nuclear Eng			2		1	3
L2	Tv Broadcasting			1			1
L4	Industrial Admin		1			1	3
L6	Arabic Studies					1	1
L9	Logistics Mgmt		1	13	2	3	19
M2	Defense Sys Anal		1	10	8	2	22
M3	Applied Math		2	3	2		7
M4	Computer Eng		4				4
M5	Computer Science(Tech)		14	18	5	2	40
M7	System Inventory Mgmt				1		1
M8	Techniques of Mgmt		2	1	3	3	11
N0	Management Info Sys	1	15	25	18	5	64
N2	Aviation Maint Tech			2			2
N3	Human Relations		3	12	1		16
N4	Biological Science				1		1
N5	Systems Mgmt		14	75	73	29	194
N6	Administration	1	9	12	8	2	33
N8	Business Mgmt	2	36	66	48	31	187
N9	Environmental Health				1		1
P1	Arts & Science		1	6	6	1	15
P6	Behavioral Science		1				1

Code	Degree Description	Lt	Capt	Maj	Ltcol	Col	Gen	Total
Q5	Data Processing					1		1
T6	Human Resource Mgmt	1	20	30	40	23	5	119
T9	????			1	1			2
0	No Subject Indicated		5	15	16	14		50
2	Archeology				1			1
4	Biology			3	1			4
6	Law			9	7	3		19
9	Physiology	1				1		2
10	Psychology			6	5	4		15
13	Accounting		2	4	3	1		10
15	Aeronautics		4	6	2	1		13
17	Architecture					1		1
18	Liberal Arts		3	10	19	9	1	42
22	Business Admin	5	97	161	118	46	5	432
23	Chemistry				1	1		2
26	Criminology			4	3	2		9
28	Economics	2	1	2	2	2	1	10
29	Education	2	10	31	27	17	3	90
30	Electronics			1				1
31	Aeronautical Eng		2	1	3	1		7
33	Civil Eng			3	2	2		7
34	Communications Eng				1			1
35	Electrical Eng		9	15	15	3	1	43
38	Industrial Eng		1	1	1	1		4
40	Mechanical Eng		3	2	3	1		9
41	Metallurgical Eng					1		1
49	Geography				1			1
51	Government			4	10	6	1	21
52	History	4	3	19	16	4	1	47
55	Industrial Mgmt			1	2	1	1	5
56	International Rel		8	19	44	28	7	106
57	Journalism		1	2		2		5
59	Language		1					1
63	Marketing			1	2			3
64	Mathematics			2	3			5
67	Military Science			9	9	4	1	23
69	Music		1					1



Code	Degree Description	Lt	Capt	Maj	Ltcol	Col	Gen	Total
73	Personnel Admin		1	1				2
74	Philosophy				1			1
76	Physical Education	2	2	2	6	1	1	14
77	Physics		4	1		1		6
78	Political Science		5	11	8	5		29
79	Printing				1			1
80	Public Admin		18	22	30	26	2	98
81	Public Relations		1	2	2			5
84	Science	4	46	57	30	24	1	162
85	Social Welfare			1				1
86	Sociology		1		1	1		3
88	Statistics				2			2
94	English	1	1	3	2			7
95	Fine Art				1	1		2
97	Social Science					2		2
Subtotals		35	414	877	728	393	51	
Total Positions								2,498

From: Department of the Navy, Headquarters United States Marine Corps,  
List of Marine Officers With Master's Degrees, By Major Subject Code  
(Washington, D.C.: Department of the Navy, 1 September 1994), 1-11.

# APPENDIX B

## DATA FOR ARMY AND MARINE CORPS

### OFFICERS ATTENDING INTERMEDIATE-LEVEL SCHOOL

TABLE 12

ARMY OFFICERS ASSIGNED TO THE COMMAND AND  
GENERAL STAFF OFFICER COURSE FROM 1994 THROUGH 1995

Year	# Army Off	# W/ Master's	# W/O Master's
1994	863	461	402
1995	858	411	447
Totals	1,721	872	849
Yearly Avg	860.5	436	424.5

From: Department of the Army, Army Command and General Staff College,  
United States Army Command and General Staff College Statistics for  
1994-1995 (Fort Leavenworth, KS: Army Command and General Staff  
College Class Directors Office, 7 December 1994), 1.

TABLE 13

ARMY OFFICERS ASSIGNED TO THE COMMAND AND  
GENERAL STAFF OFFICER COURSE FROM 1989 THROUGH 1993

Year	# Assigned	# Coop
1989	735	79
1990	780	49
1991	1,026	57
1992	1,004	61
1993	990	64
Total	4,535	310
<hr/>		
Yearly Avg	907	62

From: Department of the Army, Army Command and General Staff College, United States Army Command and General Staff College Statistics for 1989-1993 (Fort Leavenworth, KS: Army Command and General Staff College Registrar, 21 November 1994), 1-7.

TABLE 14

MARINE CORPS OFFICERS ASSIGNED TO THE  
COMMAND AND STAFF COLLEGE FROM 1989 THROUGH 1993

Year	# USMC Off	# W/Master's	# W/O Master's
1989	124	43	81
1990	121	44	77
1991	120	39	81
1992	118	34	84
1993	113	26	87
Total	596	186	410
<hr/>			
Yearly Avg	119.2	37.2	82

From: Department of the Navy, Marine Corps University, Command and Staff College, Command and Staff College Statistical Information, 1979-1995 (Quantico, VA: Command and Staff College Registrar, 30 November 1994), 2-3.

TABLE 15

MARINE CORPS OFFICERS ASSIGNED TO  
INTERMEDIATE-LEVEL SCHOOL FROM 1989 THROUGH 1993

Intermediate Level School	1989	1990	1991	1992	1993
Marine Corps Command and Staff	124	121	120	118	113
Army Command and General Staff	16	16	20	20	20
Air Command and Staff	9	9	9	9	9
Naval Command and Staff	22	22	22	22	22
Army Judge Advocate General Sch	5	5	5	2	4
Postgraduate Intelligence Sch	1	1	1	1	1
Mershon Fellow, Ohio State Univ	1	1	1	1	1
Tufts Fellow, Fletcher Law Sch	1	1	1	1	1
Australian Command and Staff	1	1	1	1	1
Canadian Command and Staff	1	1	1	1	1
French Command and Staff	1	1	1	1	1
Norwegian Command and Staff	1	1	1	1	1
German Command and Staff	1	1	1	1	1
Army Sch of Adv Mil Studies	2	3	2	3	2
Marine Corps Sch of Adv Wrfght	0	0	12	12	12
Yearly Totals	186	184	198	194	190
5-Year Average	190				

From: Electronically mailed letter to Brian Hearnberger, from Gerald T. Dennis, Marine Manpower Officer Assignments Branch, Headquarters United States Marine Corps, Washington, D.C., 17 January 1995.

## APPENDIX C

### SYSTEMS MANAGEMENT BILLET CURRICULA OBJECTIVES AND DESCRIPTIONS

#### MOS 9640: Manpower Management Officer

NPS Curriculum: 847, Manpower, Personnel and Training Analysis

Objective: To develop and analyze policies to ensure that the USMC is recruiting, training, utilizing, and retaining personnel in the most efficient and effective ways possible.

Description: This curriculum includes manpower policy development, compensation systems, productivity analysis, enlistment supply and retention models, manpower training models, manpower requirements determination processes, career mix, and enlistment incentives.

#### MOS 9644: Financial Management Specialist

NPS Curriculum: 837, Financial Management

Objective: To provide officers with an academic background in the various aspects of financing, funding, accounting, auditing, budgeting, and various other finance-related activities.

Description: This curriculum covers financial reporting standards, cost standards, cost analysis, budgeting, internal control, financial auditing, management planning and control systems, quantitative techniques used in planning and control, and the Planning Program and Budgeting System used within DoD.

#### MOS 9652: Defense Systems Analyst

NPS Curriculum: 817, Defense Systems Analysis

Objective: To provide officers with fundamental interdisciplinary techniques of quantitative problem-solving methods, behavioral and management science, economic analysis and financial management and to enable the officers to evaluate the written research study and analysis product of others throughout their careers. The curriculum further provides the officer with the specific functional skills required to effectively manage.

Description: This curriculum incorporates interdisciplinary programs which integrate mathematics, accounting, economics, behavioral science, financial management, management theory, operations/systems analysis into an understanding of how the defense mission is accomplished.

MOS 9656: Contracting Officer

NPS Curriculum: 815, Contract Management

Objective: To provide officers with graduate education in the fundamentals of procurement and contracting at systems commands, field offices, and contract administration offices.

Description: This curriculum focuses on contracting principles, contract law, contract administration, pricing and negotiations, contracting for major systems, and contracting policy.

MOS 9657: Systems Acquisition Management Officer

NPS Curriculum: 817A, Systems Acquisition Management

Objective: To provide officers with graduate education in the fundamental concepts, methodology and analytical techniques required for the life cycle management of planning and acquisition of defense systems and weapons.

Description: This curriculum is designed to fulfill the Marine Corps need for acquisition/program managers in major systems, commands and field activities. Course emphasis is on acquisition/program management, contracting, systems engineering, finance and budgeting, research and development, test and evaluation, integrated logistics, support, and quality assurance/control.

MOS 9662: Material Management Officer

NPS Curriculum: 827, Material Logistics Support Management

Objective: To provide integrated logistic support of weapons systems and various aspects of logistics and material management.

Description: This curriculum includes studies in mathematics, accounting, economics, behavioral science, management theory and operations analysis, and delves into production management, inventory management, integrated logistic support, procurement policies, contract administration, and systems acquisition and project management.

From: Department of the Navy, Headquarters United States Marine Corps, Marine Corps Order 1520.9F, Special Education Program (SEP) (Washington, D.C.: Department of the Navy, 4 May 1993), Encl 2, 2-9.

## APPENDIX D

### GENERIC SYSTEMS MANAGEMENT CURRICULUM

<u>Course Description</u>	<u>Credit Hours</u>
Systems Management	
Systems Management and Organizational Theory	3
Psychological Factors in Systems Management	3
Principles of Systems	3
Human Systems	
Deterministic Models in Decision-Making	3
Socioenvironmental Factors in Systems Management	3
Probabilistic Models in Decision Making	3
Systems Science	
Human-Machine Factors in Systems	3
Systems Economics	3
Systems Analysis	3
Specialty Options (3 courses)	<u>9</u>
Total Semester Hours	36

#### Specialty Courses

Managing Information Systems	3
Teleprocessing and Computer Networks	3
Decision Support and Expert Systems	3
Space Environment	3
Remote Sensing from Space	3
Space Operations	3
Systems Acquisition	3
Systems Integration (Project Management)	3
Management of Research, Development, Testing and Evaluation	3
International Business Operation	3
International Trade Management	3
Cross-cultural Management	3

From: Capitol College, Graduate School of Systems Management, Master of Science in Systems Management Degree Program, 1992-1994 Bulletin  
(Laurel, MD: Capitol College, 1992), 10-13.

APPENDIX E

LETTER TO CAPITOL COLLEGE REQUESTING TRANSFER CREDIT  
FOR COURSES TAKEN AT THE MARINE CORPS COMMAND AND STAFF COLLEGE

303 Hancock Ave.  
Fort Leavenworth, KS 66027  
February 28, 1995

Jon W. Whitton, Administrative Director  
Graduate School of Systems Management  
Capitol College  
Three Skyline Place  
5201 Leesburg Pike, Suite 103  
Falls Church, VA 22041

Dear Mr. Whitton:

I am conducting research for my master's degree to determine if the U.S. Marine Corps should offer a Cooperative Degree Program to officers assigned to the Command and Staff College, Quantico, Virginia. A similar program is available at the Army Command and General Staff College, Ft. Leavenworth, Kansas. The Marine Corps program would assist officers to obtain a Master's of Science in Systems Management (MSSM) in association with their military school. Selected officers attend Command and Staff College between their 12th and 16th year of service.

For a Cooperative Degree Program to be feasible, student officers must be awarded at least six hours of credit for completion of master's-level courses at the Command and Staff College by a civilian college. Ideally, transfer credit for Command and Staff College would be for a portion of the core MSSM curriculum.

I have spoken with Susan Scott and Darla Duval about the program. They provided me with information concerning the Capitol College Systems Management Degree. The literature mentioned that "credit is granted for senior military programs." Approximately 65 Marine Corps positions could be filled by graduates of the MSSM program. My research is focused on master's degree positions in the Marine Corps that are either vacant or filled by officers without the required postgraduate credentials. Your MSSM program has the potential to



augment Naval Postgraduate School filling additional systems management positions.

The impact of a Cooperative Degree Program on Capitol College would be an increase of up to ten students a year in the after-hours courses offered at Quantico, Virginia. Students would complete their master's degree during the following year at one of your locations in northern Virginia or Laurel, Maryland. Additional officers can be expected to enroll at Capitol College if credit is awarded for their academic studies at the Command and Staff College.

I would request that you please review the attached documents and determine the number of hours that Capitol College could grant toward a Master's of Science in Systems Management degree for completion of the Command and Staff College. I have included the American Council on Education recommendations and description of the college.

Please consider the value of the Master of Military Studies Program in your evaluation of the curriculum for MSSM directed research. Congress awarded Federal degree-granting authority for the program in November, 1994. The Command and Staff College is now pursuing master's degree accreditation from the Southern Association of Colleges and Schools.

I am not authorized to make agreements for the Marine Corps. My research is purely theoretical. Any agreements between Capitol College and the Marine Corps Command and Staff College would be independent of this research. Your response will be an enclosure to my research paper. A copy of my research paper will be provided to you and the Registrar of the Command and Staff College.

I would also ask that you return your response by March 15, 1995 to facilitate the completion of my paper. I can be reached at (913) 758-0827, FAX 684-2771. I will be contacting you soon to discuss the Cooperative Degree Program.

Sincerely,

Brian Hearnberger  
Major, U.S. Marine Corps  
Army Command and General Staff College

BJH/moc  
Enc.

Sample Marine Corps Command And General Staff College Transcript

Command and Staff College  
Marine Corps University  
Quantico, VA 22134-5068  
Telephone: (703) 640-2788

Student Name:

Rank:           Service:

SSN:

Dates of Attendance:     9 August 1993 - 8 June 1994

Honors: Distinguished Graduate

<u>Courses Completed:</u>	<u>Course Hours</u>	<u>Grade</u>
<u>First Semester: The Art and Science of War</u>		
<u>Theory and Nature of War</u> The evolution of warfare from the 18th Century to the present from the perspective of both western and eastern cultures.	82.0	B
<u>Chancellorsville and Gettysburg Historical Staff Rides</u> The tactical, operational and strategic aspects of the battles.	30.0	Pass
<u>Strategic-Level of War</u> A study of strategic thought which explores the relationship between national interests, the development of national goals/objectives, and the considerations attendant to the use of military force in pursuit of those goals and objectives.	105.0	A
<u>Operational-Level of War</u> An analysis of the strategic guidance provided by the national command authority. The course examines the concept of the strategic, operational and tactical levels of war.	144.0	A

Second Semester: Warfighting . . . from the Sea

Introduction to Marine Air-Ground Task

Force (MAGTF) Operations

105.5 B

Four subcourses focusing on the concepts, considerations and procedures attendant to the task organization, deployment and employment of a MAGTF in varying scenarios across the spectrum of conflict follow the basic curriculum.

Defensive Operations (Korea)	98.5	A-
Amphibious/Offensive OPS (Tunisia)	146.0	A-
Operations Other than War (Cuba)	64.0	B
Capstone Exercise (Iran)	123.0	Pass

Electives Program

30.0 A

Students select from 15 elective topics:

Complete list attached

Examples: National Security Strategy  
Decision Making  
Planning Systems

Military Issues Paper: in lieu of Master's Program

N/A

Master's Program (optional): Completed Master of Military Studies Paper in conjunction with the core curriculum.

Pass

Example Topics: (1) U.S. Transportation Command and Strategic Sealift Capability  
(2) Feasibility of Managing Communications Networks on the Battlefield

Professional Enrichment

107.5

A series of lectures and seminars on topics of current concern or interest to professional military officers and civilian managers. Lectures include topics such as military ethics, cross-cultural communications, media/military relations, Constitution Day, Concept of Command, Myers Brigg Type Indicator, Wellness and its Impact on Personal Lifestyle, Combat Leadership, etc. Speakers include general officers, government officials, and noted professionals from various military and civilian organizations, both national and international.

---

1,035.5 hours &  
paper

APPENDIX F

LETTER TO THE FLORIDA INSTITUTE OF  
TECHNOLOGY REQUESTING TRANSFER CREDIT FOR COURSES  
TAKEN AT THE MARINE CORPS COMMAND AND STAFF COLLEGE

303 Hancock Ave.  
Fort Leavenworth, KS 66027  
February 28, 1995

Randy Cullum, Director of Student Services  
Off-Campus Programs Office  
Florida Institute of Technology  
150 West University Blvd.  
Melbourne, FL 32901

Dear Mr. Cullum:

I am conducting research for my master's degree to determine if the U.S. Marine Corps should offer a Cooperative Degree Program to officers assigned to the Command and Staff College, Quantico, Virginia. As you know, Florida Tech offers a similar program at the Army Command and General Staff College, Ft. Leavenworth, Kansas. The Marine Corps program would assist officers to obtain a Master's of Science (MS) degree from your Alexandria, Virginia campus in association with their military school. Selected officers attend Command and Staff College between their 12th and 16th year of service.

For a Cooperative Degree Program to be feasible, student officers must be awarded at least six hours of credit for completion of master's-level courses at the Command and Staff College by a civilian college. Ideally, transfer credit for Command and Staff College would be for a portion of the core curriculum offered at your Alexandria campus.

I have reviewed your Off-Campus Program Brochure. Systems management, contract management, and material acquisition management degrees can help the Marine Corps fill positions with qualified officers. The literature mentioned that credit is granted for several senior-level military education programs. Approximately 65 Marine Corps positions could be filled by graduates of Florida Tech master's

programs. My research is focused on master's degree positions in the Marine Corps that are either vacant or filled by officers without the required postgraduate credentials. Your MS program has the potential to augment Naval Postgraduate School filling additional postgraduate positions.

The impact of a Cooperative Degree Program on Florida Tech would be an increase of up to ten part-time students a year in the courses offered at Quantico, Virginia. Officers would complete their master's degree as full-time students during the following year. Additional Marine Corps officers can be expected to enroll at Florida Tech if credit is awarded for their academic studies at the Command and Staff College. Large officer populations are also located near your New Orleans and Washington, D.C. area campuses.

I would request that you please review the attached documents and determine the number of hours that Florida Tech could grant toward an MS degree for completion of the Command and Staff College. I have included the American Council on Education recommendations and description of the college.

Please consider the value of the Master of Military Studies Program in your evaluation of the curriculum for MS directed study. Congress awarded Federal degree-granting authority for the program in November, 1994. The Command and Staff College is now pursuing master's degree accreditation from the Southern Association of Colleges and Schools.

I am not authorized to make agreements for the Marine Corps. My research is purely theoretical. Any agreements between Florida Tech and the Marine Corps Command and Staff College would be independent of this research. Your response will be an enclosure to my research paper. A copy of my research paper will be provided to you and the Registrar of the Command and Staff College.

I would also ask that you return your response by March 15, 1995 to facilitate the completion of my paper. I can be reached at (913) 758-0827, FAX 684-2771. I will be contacting you soon to discuss the Cooperative Degree Program.

Sincerely,

Brian Hearnberger  
Major, U.S. Marine Corps  
Army Command and General Staff College

BJH/moc  
Enc.

## Appendix G

### AMERICAN COUNCIL ON EDUCATION DESCRIPTION AND CREDIT

#### RECOMMENDATIONS FOR THE MARINE CORPS COMMAND AND STAFF COLLEGE

College and Curriculum ID Number: MC-1408-0017

Location: Marine Corps University, Quantico, VA

Length: 43 weeks (1,578 hours), September '93 - Present.

Learning Outcomes: Upon completion of the course, the student will be able to prepare and communicate ideas in written and oral presentations involving complex and diverse military concepts, tactics, strategies, and theories. Through formal research and analysis, the student should understand how military history and strategy are integrated, and how the fundamental political-military relationship shapes the planning, organizing and implementation of theater-level operations. The student will be able to employ research which draws on a wide range of government and public sources, and prepare clear, specific, and unambiguous plans, directives, and orders for project and program management. The student will also be able to communicate clearly with superiors, subordinates, and peers. The student will be able to prepare logistics and operational plans to achieve the objectives and goals of the theater of operations. Students electing to take the research seminar will demonstrate historical and social science research and writing skills appropriate to the professional military history and military policy studies fields. Students may choose a thesis option involving in-depth research under faculty supervision.

Instruction: Information in the course encompasses the theory and nature of warfare, and strategic thought (national decision making), translated to the operational-level of war. Topics include critical thinking, geo-political and current international relations, executive leadership, influences on national policy, the national security policy process, strategic geography; and case studies illustrating the principles and applications of the theory and strategy of war. Instruction includes lectures, multi-media presentations, role-playing, seminars, small group seminars, field trips, and independent studies.

Credit Recommendation: This course, particularly in its most advanced requirements, is military-specific in many subject areas and much content is not readily transferable to general civilian academic subjects by design. The credit recommended represents only those

portions of the curriculum that are readily substitutable for similar courses in civilian colleges and universities. In the upper-division baccalaureate category, 3 semester hours in written/oral communication, 3 in organizational management, 3 in international relations, 3 in military history, 2 in field study of organizational management, and credit in the electives program based on a review of the receiving institution's review of papers and materials provided by the student; in the graduate degree category, 3 semester hours in US national security or 3 in US foreign policy, 3 in evolution of strategic thought, and 1-3 in directed research according to the receiving institution's review of the student's thesis paper (2/94).

From: American Council on Education, The 1994 Guide to the Evaluation of Educational Experiences in the Armed Services: Air Force, Coast Guard, Department of Defense, and Marine Corps (Washington, D.C.: American Council on Education, 1994), 1-137.

APPENDIX H

LETTER FROM CAPITOL COLLEGE CONCERNING  
A POTENTIAL MARINE CORPS COOPERATIVE DEGREE PROGRAM



# ***CAPITOL COLLEGE***

GRADUATE SCHOOL OF SYSTEMS MANAGEMENT

March 14, 1995

Brian Hearnberger  
Major, U.S. Marine Corps  
303 Hancock Avenue  
Ft. Leavenworth, KS 66027

Dear Major Hearnberger:

Following up on our telephone conversation and your letter, we would welcome participation in a cooperative degree program, and we would accept six semester hours of transfer credit for officers completing the USMC Command and Staff College program. Depending on electives studied and the detailed nature of those electives, transfer credit might be awarded for a core course, SM-513, in lieu of an elective.

Very Truly Yours,



George J. Ellis, Ph.D.  
Academic Director

---

ACADEMIC OFFICES

11301 Springfield Road, Laurel, Maryland 20708-9759 • (301) 953-0060 • Fax (301) 953-3876

APPENDIX I

LETTER FROM FLORIDA INSTITUTE OF TECHNOLOGY  
CONCERNING A POTENTIAL MARINE CORPS COOPERATIVE DEGREE PROGRAM



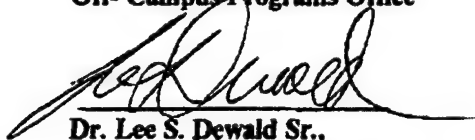
Reply to: Ft. Lee Graduate Center  
Building 12500  
ATTN: ATSZ-AT-FIT  
Ft. Lee, VA 23801-6040  
(804) 862-3744 ■ Fax: (804) 765-4663

**MEMORANDUM**

March 28, 1995

**TO: Mr. Randy Cullum, Director of Student Service  
Off-Campus Programs Office**

**FROM:**

  
**Dr. Lee S. Dewald Sr.,  
Program Director/Ft. Lee Graduate Center**

**SUBJECT: Evaluation of USMC CGSC for FIT Graduate Credit**

1. Per your request, I have reviewed the packet of CGSC materials from USMC and the ACE recommendations.
2. I recommend that transfer credit be granted for:  
BUS 5013 Organizational Behavior  
MAN 5010 Seminar in Research Methodology
3. I was unable to evaluate the USMC Electives program at CGSC for transfer credit because no description of the electives was included.

## BIBLIOGRAPHY

### Books

- Bailey, Stephen K. Academic Quality Control: The Case of College Programs on Military Bases. Washington, D.C.: American Association for Higher Education, 1979.
- Janowitz, Morris. The Political Education of Soldiers. Beverly Hills, CA: Sage Publications, 1983.
- Jarvis, Peter. The Sociology of Adult and Continuing Education. London: Routledge, 1985.
- Leedy, Paul D. Practical Research. New York, NY: MacMillan, 1989.
- Leggett, Glenn H.; Mead, David C.; and Kramer, Melinda G. Handbook For Writers. Englewood Cliffs, NJ: Prentice Hall, 1988.
- Miller, Jerry W. and Mills, Olive. Credentialing Educational Accomplishment. Washington, D.C.: American Council on Education, 1978.
- Stephens, Michael D. The Education of Armies. New York, NY: St. Martin's Press, 1989.
- Turabian, Kate L. Student's Guide for Writing College Papers. Chicago, IL: The University of Chicago Press, 1987.

### Periodicals and Articles

- Azam, Mohammad, Lieutenant Colonel. "Hi-tech Officers - asset or liability in combat leadership." U.S. Army Aviation Digest, (November - December 1991): 10-12.
- Bell, John M. "Professional Military Education: Tasks, Topics, Needs." Armed Forces and Society, vol 12, no 3, (Spring 1986): 419-430.
- Bergmeister, Francis X., Major. "Officer PME: A beer diet for champagne taste." Marine Corps Gazette, vol 76, no 4, (April 1992): 38-41.

- Bittner, Donald F. "Foreign Military Officer Training in Reverse: U.S. Marine Corps Officers in the French Professional Military Education System in the Interwar Years." The Journal of Military History, vol 57, no 3, (July 1993): 481-510.
- Eicher, James M., Lieutenant Colonel. "The School of Advanced Warfighting." Marine Corps Gazette, vol 75, no 1, (January 1991): 46-48.
- Fink Jr., Ord J., Colonel. "Education: Ammunition for the Field-grade Officers T/O Weapon - his mind." Marine Corps Gazette, vol 77, no 6, (June 1993): 53-57.
- Galvin, John R, General. "How We Can Nurture Military Strategists." Defense, (January-February 1989): 24-29.
- Linn, Thomas, Major. "The opening of the military mind." Marine Corps Gazette, vol 73, no 7, (July 1989): 19-20.
- Maslowski, Peter. "Army Values and American Values." Military Review, vol 70, no 4, (April 1990): 10-23.
- McNamara, Michael F., Captain. "Price of remaining amateurs - in the field of education." Marine Corps Gazette, vol 78, no 2, (February 1994): 54-58.
- Meyer, Carlton W, Captain, USMCR. "NOFAD Program: Allowing for Advanced Education." Marine Corps Gazette, vol 76, no 3, (March 1992): 45.
- Millett, Allen R. "Professional Military Education and Marine Officers." Marine Corps Gazette, vol 73, no 11, (November 1989): 46-56.
- Muise, Robert J., Captain. "Officer Education: The flawed System." Marine Corps Gazette, vol 78, no 6, (June 1994): 29-30.
- Picart, Jose A., Major. "Expert Warfighters With Battlefield Vision." Military Review, vol 71, no 5, (May 1991): 51-60.
- Shulimson, Jack. "Daniel Pratt Mannix and the Establishment of the Marine Corps School of Application, 18889-1894." The Journal of Military History, vol 55, no 4, (October 1991): 469-485.
- Southwick, Curt B., Lieutenant Colonel. "Marine Corps Art of War Studies/School of Advanced Warfighting." Marine Corps Gazette, vol 75, no 1, (January 1991): 47-48.
- Stein, Les, Major. "Getting the Second Degree." Proceedings, vol 115, no 6, (June 1989): 70-71.

Van Riper, Paul K., Major General. "Use of military history in the professional education of officers." Marine Corps Gazette, vol 78, no 2, (February 1994): 49-53.

#### Government Documents

American Council on Education. The 1994 Guide to the Evaluation of Educational Experiences in the Armed Services: Air Force, Coast Guard, Department of Defense, and Marine Corps. Washington, D.C.: American Council on Education, 1994.

Chairman, Joint Chiefs of Staff. Chairman's Manual CM-1618-93. Military Education Policy Statement. Washington, D.C.: Department of Defense, 23 March 1993.

Defense Activity for Non-traditional Education Support. Servicemembers Opportunity Colleges. Pensacola, FL: Defense Activity for Non-traditional Education Support, September 1993.

Department of the Air Force. Air Force Institute of Technology 1993-1995 Graduate Catalog. Wright-Patterson Air Force Base, OH: Air Force Institute of Technology, 1993.

Department of the Army, Army Command and General Staff College, CGSC Circular 351-1. United States Army Command and General Staff College Catalog. Fort Leavenworth, KS: Department of the Army, July 1994.

Department of the Army, Army Command and General Staff College. United States Army Command and General Staff College Statistics for 1989-1993. Fort Leavenworth, KS: Army Command and General Staff College Registrar, 21 November 1994.

Department of the Army, Army Command and General Staff College. United States Army Command and General Staff College Statistics for 1994-1995. Fort Leavenworth, KS: Army Command and General Staff College Class Directors Office, 7 December 1994.

Department of the Army, Army Regulation 621-1. Training of Military Personnel at Civilian Institutions. Washington, D.C.: Department of the Army, 15 October 1985.

Department of the Army, Army Regulation 621-5. Army Continuing Education System. Washington, D.C.: Department of the Army, 17 November 1993.

Department of the Army, Army Regulation 621-108. Military Personnel Requirements for Civilian Education. Washington, D.C.: Department of the Army, 3 March 1992.

Department of the Army, United States Army Engineer School. Army Engineer School - University of Missouri-Rolla Cooperative Program Memorandum of Agreement. Fort Leonard Wood, MO: Army Engineer School, 1 August 1994.

Department of Defense, Department of Defense Directive 5010.16-6. Defense Management Education And Training Catalog. Washington, D.C.: U.S. Government Printing Office, June 1991.

Department of Defense, Department of Defense Directive 5000.52M. Career Development Program For Acquisition Personnel. Washington, D.C.: U.S. Government Printing Office, September 1990.

Department of Defense, Office of the Under Secretary of Defense (Acquisition and Technology). Defense Acquisition University Catalog, 1994-1995. Alexandria, VA: Defense Acquisition University, 1994.

Department of Labor, Employment and Training Administration. Directory of Occupational Titles. Lincolnwood, IL: VGM Career Horizon Books, 1991.

Department of the Navy. Naval Postgraduate School Catalog, Academic Year 1994. Monterey, CA: Naval Postgraduate School, 1994.

Department of the Navy, College of Naval Command and Staff and Continuing Education. Naval War College Report of Self Study. Newport, RI: Department of the Navy, 1993.

Department of the Navy, Headquarters United States Marine Corps. List of Marine Officers With Master's Degrees, By Major Subject Code. Washington, D.C.: Department of the Navy, 1 September 1994.

Department of the Navy, Headquarters United States Marine Corps. Roster of Special Education and Advanced Degree Program Billets. Washington, D.C.: Department of the Navy, 4 August 1994.

Department of the Navy, Headquarters United States Marine Corps, Marine Corps Bulletin 1560. Academic Year 1994-1995 (AY94-95) Intermediate-Level School (ILS) Selections. Washington, D.C.: Department of the Navy, 3 June 1993.

Department of the Navy, Headquarters United States Marine Corps, Letter 1520/MMOA-3. OP-14 Data Update for the FY96/97 Naval Comptroller Budget. Washington, D.C.: Department of the Navy, 1 June 1994.

Department of the Navy, Headquarters United States Marine Corps. Marine Corps Order P1200.7N. Military Occupational Specialties Manual. Washington, D.C.: Department of the Navy, 23 March 1994.

Department of the Navy, Headquarters United States Marine Corps, Marine Corps Order 1520.9F. Special Education Program (SEP). Washington, D.C.: Department of the Navy, 4 May 1993.

- Department of the Navy, Headquarters United States Marine Corps, Marine Corps Order 1560.19C w/ch 1. Advanced Degree Program (ADP). Washington, D.C.: Department of the Navy, 8 September 1981.
- Department of the Navy, Headquarters United States Marine Corps, Marine Corps Order 1560.25A w/ch 1. Marine Corps Voluntary Education Program. Washington, D.C.: Department of the Navy, 29 July 1981.
- Department of the Navy, Headquarters United States Marine Corps, Marine Corps Order 1560.26 w/ch 1. Marine Corps Tuition Assistance Program. Washington, D.C.: Department of the Navy, 20 May 1977.
- Department of the Navy, Headquarters United States Marine Corps, Marine Corps Order 5320.12C. Staffing Precedences For Officer and Enlisted Billets. Washington, D.C.: Department of the Navy, 27 May 1994.
- Department of the Navy, Marine Corps University, Command and Staff College. Command and Staff College Statistical Information, 1979-1995. Quantico, VA: Command and Staff College Registrar, 30 November 1994.
- Department of the Navy, Marine Corps University. Command and Staff College Syllabus of Instruction, Academic Year 1994-1995. Quantico, VA: Marine Corps University, 1994.
- Department of the Navy, Marine Corps University. Command and Staff College Master of Military Studies Requirements for the Degree, Academic Year 1994-1995. Quantico, VA: Marine Corps University, 1994.
- National Center for Education Statistics. Digest of Education Statistics. Washington, D.C.: U.S. Government Printing Office, October 1993.
- U.S. Congress House, Committee on Armed Services, Report of the Panel on Military Education of the One Hundredth Congress. 101st Congress, 1st Session, 21 April 1989.
- U.S. Congress House, Committee on Armed Services, Advanced Studies at the Command and Staff Colleges. 102nd Congress, 2nd Session, 23 July 1992.
- U.S. Congress House, Committee on Armed Services, Professional Military Education. Public Law 103-160, 103rd Congress, 1st Session, January 1994.
- U.S. General Accounting Office, National Security and Internal Affairs Division. Briefing Report to the Chairman, Panel on Military Education, Committee on Armed Services, House of Representatives. Washington, D.C.: U.S. Government Printing Office, March 1991.



U.S. General Accounting Office. Marine Corps: Status of Recommendations on Officers Professional Military Education. Washington, D.C.: U.S. Government Printing Office, February 1991.

Wade, Gary, Lieutenant Colonel. WWII Division Commanders. Fort Leavenworth, KS: Combat Studies Institute, 1990.

#### Unpublished Materials

Andrus, Burton C., Jr. "The Impact of Various Master's Degrees on the Careers of the United States Air Force Officers Who Are Academy Graduates." Doctoral Dissertation, Denver, CO: University of Denver, 1985.

Dennis, Gerald T. Marine Manpower Officer Assignments Branch, Headquarters United States Marine Corps, Washington, D.C. Electronically mailed letter to Brian Hearnberger, 17 January 1995.

Dewald Sr., Dr. Lee S. Florida Institute of Technology Graduate Program Director, Fort Lee Campus, VA. Letter to Randy Cullum, Director of Student Service, Florida Institute of Technology Off-Campus Programs Office, 28 March 1995.

Ellis, George J., Ph.D. Academic Director, Capitol College Graduate School of Systems Management, Laurel, MD. Letter to Brian Hearnberger, 14 March 1995.

Franchi, William. Regular Officer Procurement Director, Headquarters United States Marine Corps, Washington, D.C. Facsimile letter to Brian Hearnberger, 2 November 1994.

Lienau, Chad. Special Education Program Coordinator, Headquarters United States Marine Corps, Washington, D.C. Facsimile letter to Brian Hearnberger, 30 September 1994.

Lienau, Chad. Special Education Program Coordinator, Headquarters United States Marine Corps, Washington, D.C. Facsimile letter to Brian Hearnberger, 11 October 1994.

Rohler, Linda. Registrar, Marine Corps Command and Staff College, Quantico, VA. Facsimile letter to Brian Hearnberger, 3 April 1995.

Shields, Greg. Voluntary Education Program Coordinator, Headquarters United States Marine Corps, Washington, D.C. Facsimile letter to Brian Hearnberger, 13 October 1994.

Stein, Leslie. "The United States Marine Corps Officers' Attitudes Toward Graduate Degrees." Doctoral Dissertation, San Diego, CA: United States International University, 1987.

Strout, Joel. Cooperative Degree Program Manager, Army Personnel Command, Arlington, VA. Facsimile letter to Brian Hearnberger, 21 October 1994.

### Other Sources

#### Bulletins, Catalogs, Dictionaries, and Guides

American University. Graduate Programs. Washington, D.C.: American University, 1995.

Capitol College. Graduate School of Systems Management, Master of Science in Systems Management Degree Program, 1992-1994 Bulletin. Laurel, MD: Capitol College, 1992.

Educational Testing Service. The Official GRE/CGS Directory of Graduate Programs, Volume A: Natural Sciences. Princeton, NJ: Educational Testing Service, 1993.

Florida Institute of Technology. General Information and Descriptions of Florida Institute of Technology Off-Campus Graduate Programs. Melbourne, FL: Florida Institute of Technology, September 1994.

George Mason University. Graduate Catalog, 1994-1996. Fairfax, VA: George Mason University, 1994.

Peterson's. Peterson's Guide to Graduate and Professional Programs: An Overview, 1995. Princeton, NJ: Peterson's Guides, 1995.

University of Missouri-Rolla. Graduate Catalog. Rolla, MO: University of Missouri, July 1993.

#### Films

Military Education. Congressman Ike Skelton. Command and General Staff College, Fort Leavenworth, KS, 16 April 1993.

Military Education. Congressman Ike Skelton. Command and General Staff College, Fort Leavenworth, KS, 4 April 1994.

#### Interviews

Dewald Sr., Dr. Lee S. Florida Institute of Technology Graduate Program Director, Fort Lee Campus, VA. Telephone interview, 10 April 1995.

Lowden, Ernest G., Ed.D. Program Evaluator, Office of Evaluation and Standardization, Army Command and General Staff College, Fort Leavenworth, KS. Personal interview, 13 January 1995.

McKenna, Doug. Associate Dean, Education Policy, Marine Corps Command and Staff College, Quantico, VA. Telephone interview, 23 August 1994.

Rohler, Linda. Registrar, Marine Corps Command and Staff College, Quantico, VA. Telephone interview, 2 December 1994.

Spivey, Glenn L. Education Advisor, Air Force Air Command and Staff College, Maxwell Air Force Base, AL. Telephone interview, 13 October 1994.

Newspaper

Maze, Rick. "Task force urges major changes in officer education."  
Air Force Times 28 November 1988.

INITIAL DISTRIBUTION LIST

1. Colonel Wayne Spencer, U.S. Marine Corps, Director  
Leadership Instruction Department  
Command and General Staff Officer Course  
U.S. Army Command and General Staff College  
Fort Leavenworth, KS 66027
2. Combined Arms Research Library  
U.S. Army Command and General Staff College  
Fort Leavenworth, KS 66027
3. Defense Technical Information Center  
Cameron Station  
Alexandria, VA 22314
4. Doug McKenna, Associate Dean, Education Policy  
Marine Corps Command and Staff College  
Marine Corps University  
2076 South Street  
Quantico, VA 22134
5. Greg Shields, Voluntary Education Program Coordinator  
Headquarters United States Marine Corps, (MH DIV)  
2 Navy Annex  
Washington, DC 20380
6. Jon W. Whitton  
Administrative Director  
Graduate School of Systems Management  
Capitol College  
Three Skyline Place  
5201 Leesburg Pike, Suite 103  
Falls Church, VA 22041
7. Linda Rohler, Registrar  
Marine Corps Command and Staff College  
Marine Corps University  
2076 South Street  
Quantico, VA 22134
8. Major Gordon Davidson, Instructor  
Leadership Instruction Department  
Command and General Staff Officer Course  
U.S. Army Command and General Staff College  
Fort Leavenworth, KS 66027

9. Major Chad Lienau, Special Education Program Coordinator  
Headquarters United States Marine Corps, (MMOA-3)  
2 Navy Annex  
Washington, DC 20380
10. Marine Corps Research Center  
Marine Corps University  
2040 Broadway Street  
Quantico, VA 22134
11. Randy Cullum  
Director of Student Services  
Off-Campus Programs Office  
Florida Institute of Technology  
150 West University Boulevard  
Melbourne, FL 32901
12. Ronald Cuny, Ed.D.  
Center for Army Leadership  
U.S. Army Command and General Staff College  
Fort Leavenworth, KS 66027